

THE
ARCHITECT
& BUILDING NEWS

1 SEPTEMBER 1955

VOL. 208

NO. 9

ONE SHILLING WEEKLY

• FOUR PRIVATE HOUSES

• INFORMATION DIGEST

PUBLISHED IN LONDON SINCE 1854

Magnificent Lumley Castle, Durham Seat of the Lumley family since the thirteenth century was recently completely redecorated; British Paints were granted the exclusive privilege of supplying all materials.



Where **TRADITION** *means so much*

Interior aspects of this historic building show how the discreet but effective use of modern materials can provide adequate protection and still be in harmony with the essentially dignified character of the famous interiors, designed by Sir John Vanbrugh in 1721.

Wherever there is need for decorative materials of the highest quality and finish, the experienced advice of British Paints Limited is gladly at your disposal.

BRITISH PAINTS LIMITED

Portland Road, Newcastle upon Tyne, 2.
Telephone : 25151.

Crewe House, Curzon St., London, W.1.
Telephone : Grosvenor 6401-5.



The Garter Room (above) and The Vanbrugh Corridor.

Decorated throughout with British Paints Limited materials by W. Curry Limited, Chester-le-Street, County Durham. The exterior photograph is by Aero Pictorial Limited.



*Stonyhurst College, Whalley, Lancashire.
Roofed with Ruberoid Roofing. Architect:
Wilfrid C. Mangan, M.I.A.A.S.*

remove a doubt

Special Features of The Ruberoid Roofing Service

- Built-up roofing undertaken on buildings of any shape or size—anywhere in Britain.
- Specifications include roof decks of steel, aluminium and asbestos cement, all these being insulated externally and weatherproofed with Ruberoid.
- Representatives and Branches throughout the country will give immediate attention to plans and estimates.
- Comprehensive service includes consultation, inspection and maintenance. Call in Ruberoid at an early stage.

Built-up roofings carried out to standard specifications may differ widely in quality of materials and workmanship. But a specification which stipulates that the work is to be carried out by the Ruberoid Roofing Service ensures the highest standards every time.

The best possible materials . . .

The Ruberoid materials used are world renowned for their weather resistance and durability. By refining and blending selected bitumens, and by making the base felts from which the roofings are manufactured, the Ruberoid Factories are able to control quality throughout.

. . . laid in the best possible way

Ruberoid materials, in the hands of Ruberoid craftsmen, ensure a built-up roof without equal, in which the greatest care is taken with specified and unspecified details.

Ruberoid specifications are listed in detail in Publication No. 326.

RUBEROID



Roofing Service

THE RUBEROID COMPANY LIMITED



344 Commonwealth House · 1-19 New Oxford Street · London · W.C.1

CE C.187



Armstrong
CORK COMPANY LTD.



A new Armstrong tile, a vinyl-asbestos tile, clear and clean in all its 14 colours, with a lustrous surface beauty — this is ACCOFLEX. It has sufficient flexibility to lay over suspended wood board sub-floors, or on any rigid floor such as screeded concrete, composition, etc. Here then is a flooring material for any room at all levels; in the home, office or whatever building you are planning on the drawing board . . .

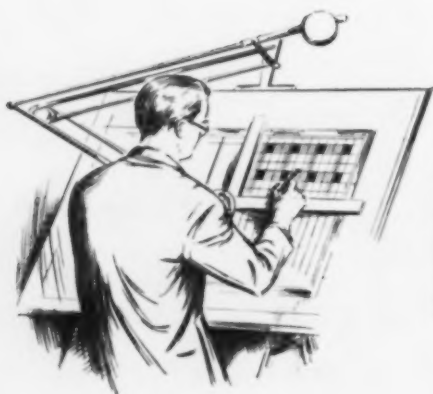
ACCOFLEX *The new vinyl tile...*



Consider ACCOFLEX in kitchens and canteens—for it is grease-resisting. Consider ACCOFLEX in laboratories—for alkalis, soaps, paraffin, and even dilute acids will not affect it!

Wherever you lay ACCOFLEX you may be sure of a surface which will give hard wear all the time, with only normal cleaning and polishing. Can you ask more of a floor? A colourful descriptive folder should be in your possession.

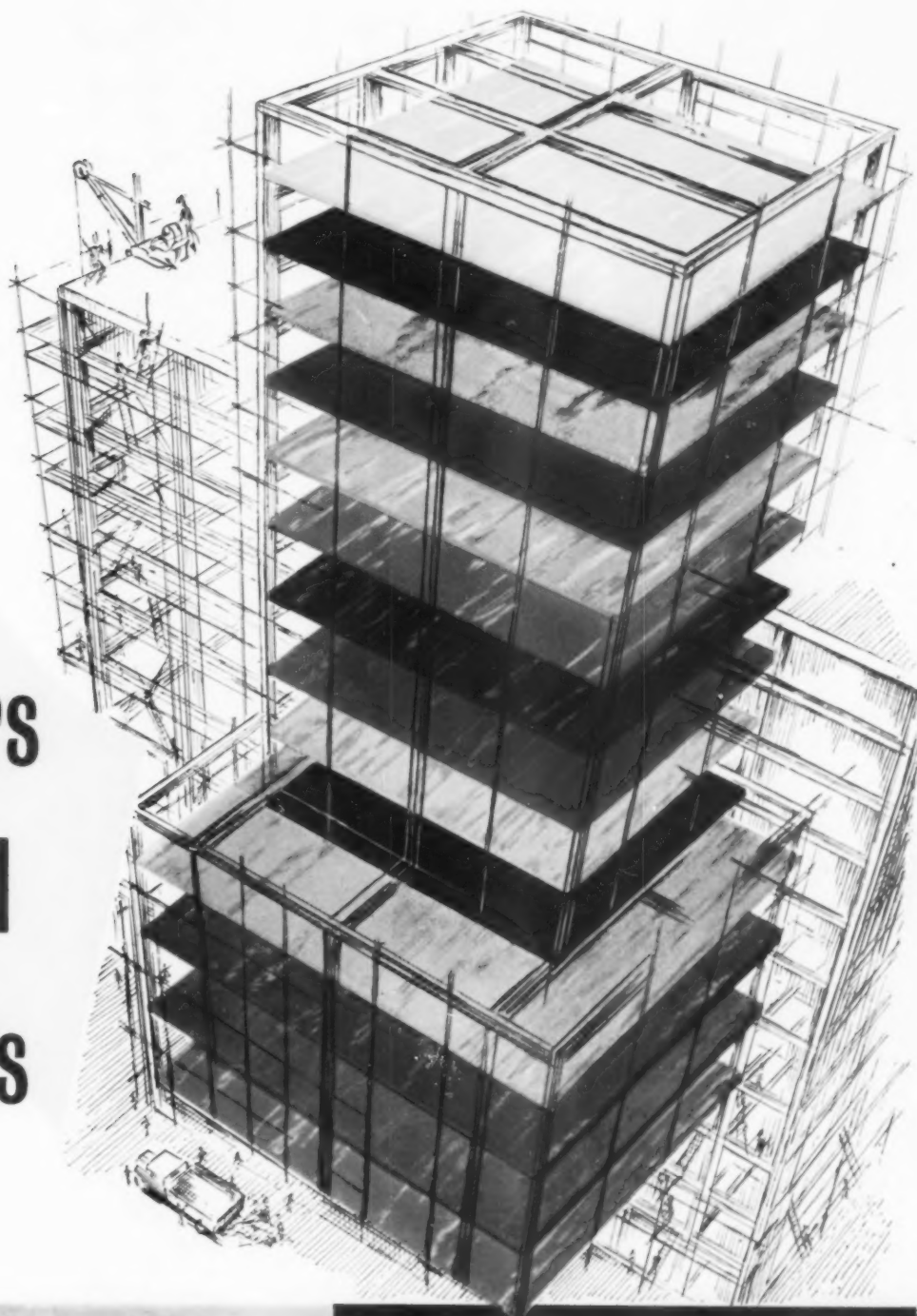
If not, please write to :
Armstrong Cork Co., Limited,
Flooring Department,
Bush House, Aldwych, W.C.2.



The latest flooring achievement

ARMSTRONG CORK COMPANY LIMITED

for
floors
at all
levels



by **Armstrong**

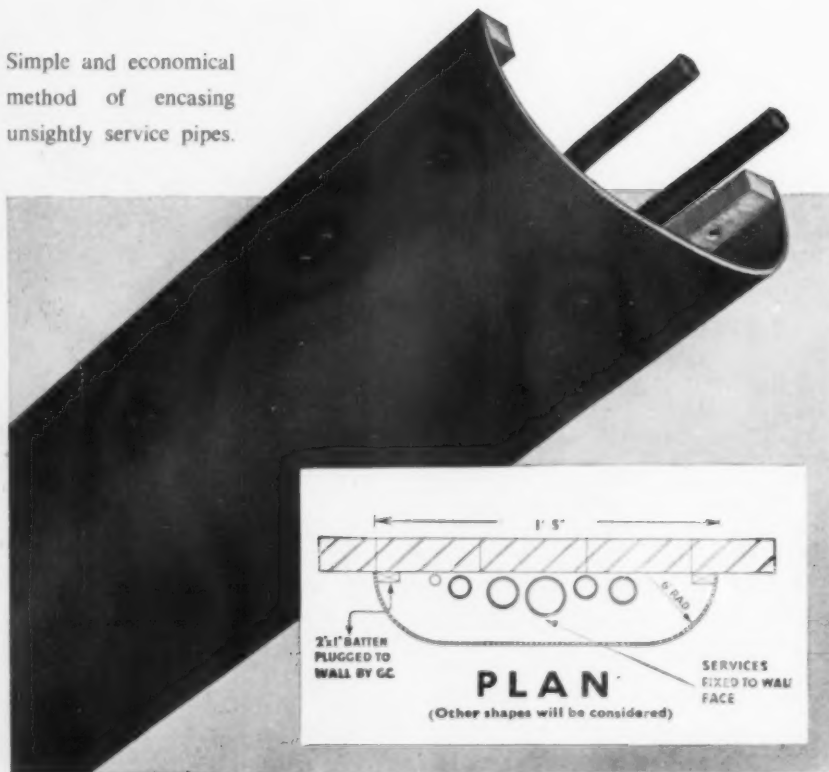
ACCOFLEX
VINYL ASBESTOS TILES

Flooring Department: BUSH HOUSE, ALDWYCH, LONDON, W.C.2. COVent Garden 1101

Sundeala

PREFORMED HARDBOARD DUCT AND TRUNKING

Simple and economical
method of encasing
unsightly service pipes.



Full particulars and Technical Service from

SUNDEALA BOARD CO. LIMITED

Head Office: ALDWYCH HOUSE, LONDON, W.C.2. Tel.: CHAncery 8159

or from its Offices at

Glasgow: BALTIC CHAMBERS, 50 WELLINGTON ST., C.2

Newcastle: NORTHUMBRIA HOUSE, PORTLAND TERRACE, 2

If you want

with acknowledgments to
Arthur Guinness Son & Co. (Park Royal) Ltd.

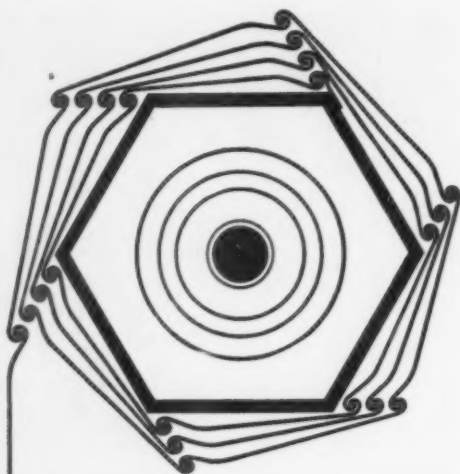
**a high
strength/weight
ratio**



SPECIFY CASTELLA BEAMS!

(Registered Trade Mark 722748/79095)
BRITISH PATENT No. 498281

UNITED STEEL STRUCTURAL COMPANY LIMITED • SCUNTHORPE • LINCOLNSHIRE



The ROLE of the

ROLADOR
ROLLING SHUTTER DOORS

The protection of all openings in:

FOUNDRIES

POWER STATIONS

WAREHOUSES

WHARVES

Haskins

Gnome House, Blackhorse Lane, London E17 • Tel: LARKSWOOD 2622



*This recessed lighting scheme of the
canteen in the American Embassy
was designed by Philips*

For Imaginative Lighting

Talk to **PHILIPS**

Philips will be happy to design for you — there is no charge

Some of the more imaginative lighting schemes of recent years have been the result of close co-operation between architects, electrical contractors, and the Philips Lighting Design Service.

The advice and assistance provided by this Philips Service is entirely free, and experienced lighting engineers in each Philips branch area are at your service. In addition, a fully qualified architect with special experience of lighting in its relation to architecture and colour is available to co-operate with you.



PHILIPS ELECTRICAL LTD

LIGHTING DIVISION · CENTURY HOUSE · SHAFTESBURY AVENUE · LONDON · W.C.1

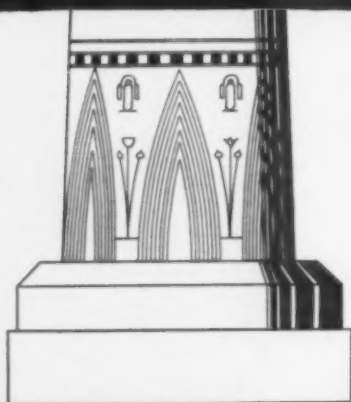
Tungsten, fluorescent, blended and discharge lamps & lighting equipment · Radio & Television Receivers · "Photoflux" flashbulbs, etc.

EGYPTIAN to...

Elegance



*Illustration : Circular Laylights
by Luxfer installed in Maple's
London Showroom.*



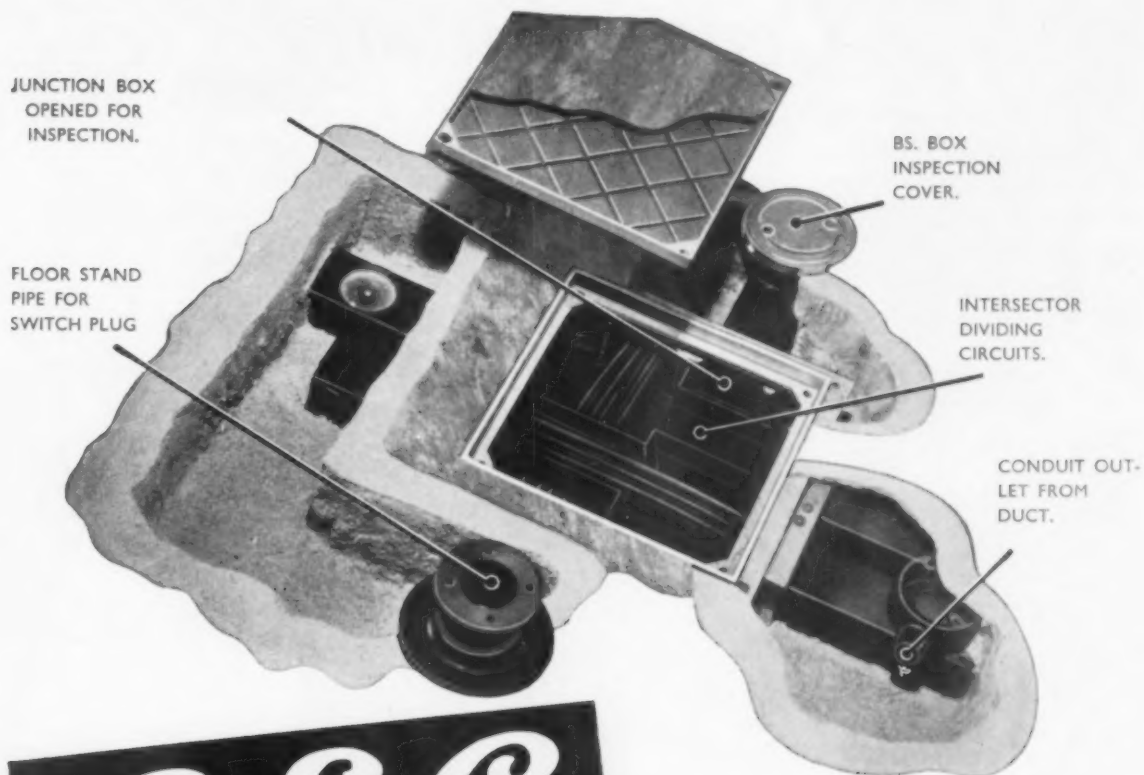
and every era of design
where trueness of line is
essential Luxfer devote
themselves to the manu-
facture of all constructions
through which daylight is
admitted into a building.

LUXFER  LIMITED

WAXLOW ROAD, HARLESDEN, LONDON, N.W.10

Telephone : ELGAR 7292

Telegrams : LUXFER, HARLES, LONDON



G.E.C.

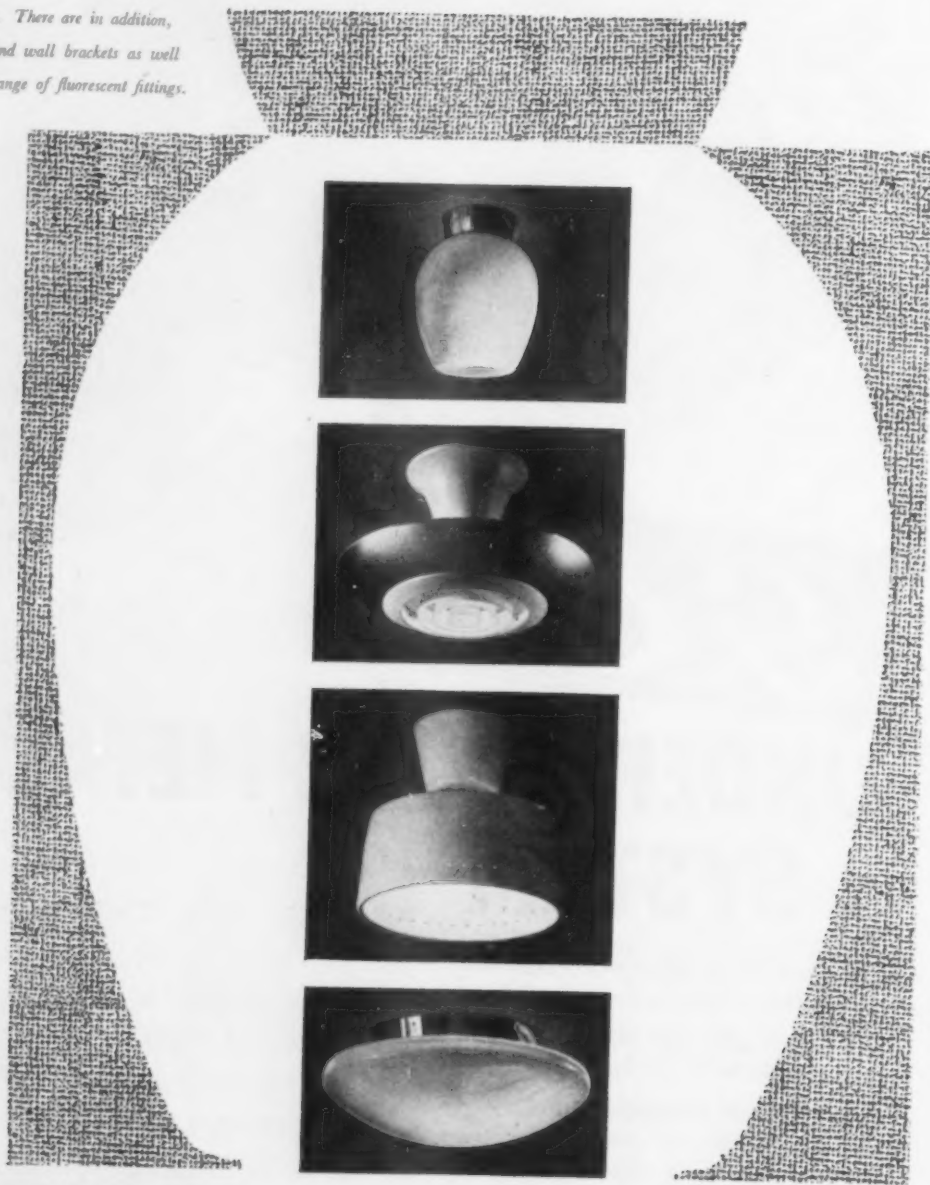
UNDER-FLOOR METAL DUCT SYSTEM

- **FACILITATES ADVANCE PLANNING**
without waiting for partition and furniture plan.
- **FLEXIBILITY AND ACCESSIBILITY.**
Provides for future extensions.
- **SHALLOW JUNCTION BOXES.**
Now enables the system to be accommodated in shallow floor screeds.
- **MULTI-ELECTRICAL SERVICES FOR MODERN BUILDINGS.**
Available for 2, 3 or 4-channel distribution and telephone services.

The G.E.C. Under-Floor Metal Duct System is the latest method of the distribution of electrical services for modern offices and commercial buildings. This system has been evolved after long experience and collaboration with architects, consultants and contractors. The whole system can be planned in advance and provides complete flexibility, mechanical strength and earth continuity.

Ceiling Fittings

These are a few of the various ceiling fittings from our standard ranges. These fittings are readily available in various sizes and there are many other designs both simple and decorative. There are in addition, pendant fittings and wall brackets as well as our range of fluorescent fittings.



TROUGHTON & YOUNG

TROUGHTON & YOUNG (Lighting) LTD.

The Lighting Centre · 143 Knightsbridge, London, S.W.1. Kensington 3444. Also at 46 Rodney Street, Liverpool, 1

Manufacturers of Ultralux, Versalite, Tubalux and Mondalite lighting fittings.

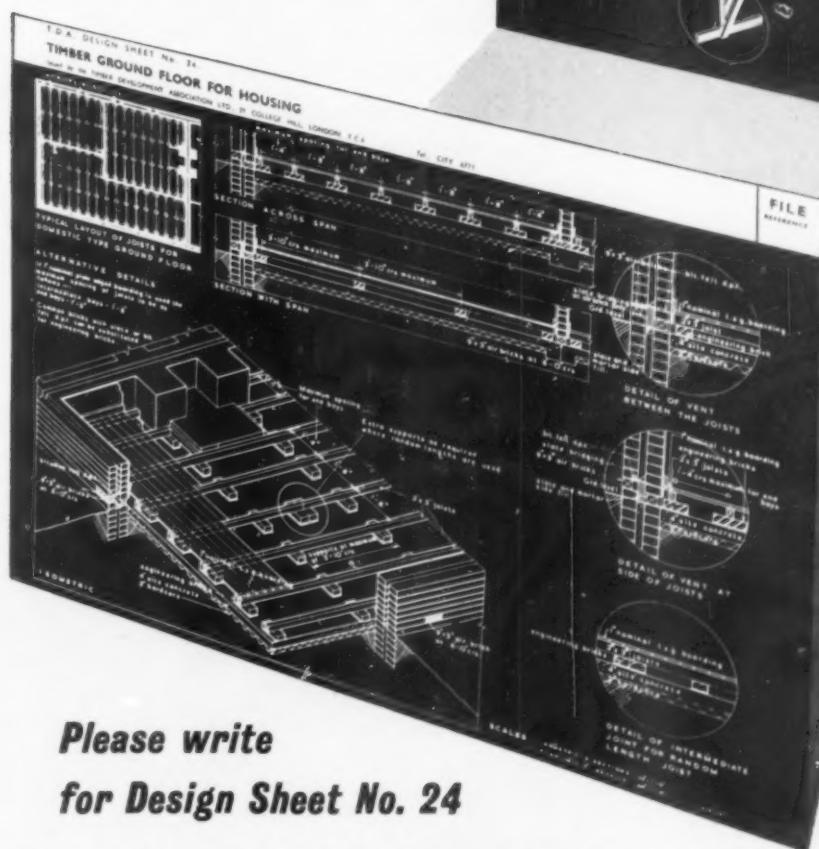
And now-

the T.D.A. Ground Floor follows the T.D.A. Roof, known and used by Housing Authorities in all parts of the country, as a further contribution to efficiency and economy in building.

the TDA-

floor design saves cost, time, excavation and bricks; it allows the use of joists in random lengths, finished with softwood boarding or decorative hardwood strip, and above all provides a warm, resilient . . .

Ground Floor



**Please write
 for Design Sheet No. 24**

ISSUED BY THE TIMBER DEVELOPMENT ASSOCIATION LIMITED : 21 COLLEGE HILL : LONDON : E.C.4.
 and branches throughout the country

TD 73A

"NAMASTIC"



For
ROOFING
FLOORING
TANKING Specify

The constant and growing demand for 'NAMASTIC' is proof of the service it gives. Every job carried out with 'NAMASTIC' is a further proof of the superiority of Asphalt guaranteed by Licensed Manufacturers of the National Association of Master Asphalters. Specify 'NAMASTIC' and ensure quality, consistency and the economy that results from the use of Asphalt made from British materials.

'NAMASTIC'

The Standard Asphalt for Building



Contracts executed by members of the



The Association has a nation-wide membership, made up of the following:

Associated Asphalt Co. Ltd.
Bolton and Hayes Ltd.
Bolton Stone Concrete & Asphalt Co. Ltd.

William Briggs & Sons Ltd.
The British & Natural Rock Asphalt Co.
Cambridge Asphalt Co. Ltd.
J. Dunlop & Co (Asphalt) Ltd.

Durable Asphalt Co. Ltd.
Durastic Ltd.
Excel Asphalt Co. Ltd.
Faldo Asphalt Co. Ltd.
Field & Palmer Ltd.
'Flexi-Mastic' Roofs & Asphalts Ltd.
R. J. Goddard & Co. Ltd.
John Hadfield & Sons Ltd.

Improved Asphalt Co. Ltd.
W. H. Keys Ltd.
Natural Rock Asphalt Ltd.
Northern Asphalt & Roofing Works Co. Ltd.
Oxford Asphalt Co.
C. Pasini (Ipswich) Ltd.
Permanite Ltd.

The Rock Asphalt Co. Ltd.
The Scottish Speedwell Co. Ltd.
Charles Seagle
H. V. Smith & Co. Ltd.
J. Taylor & Sons (Asphalters) Ltd.
Wm. Townson & Sons Ltd.
W. G. Walker & Co. (Ayr) Ltd.
W. G. Walker & Sons (Edinburgh) Ltd.

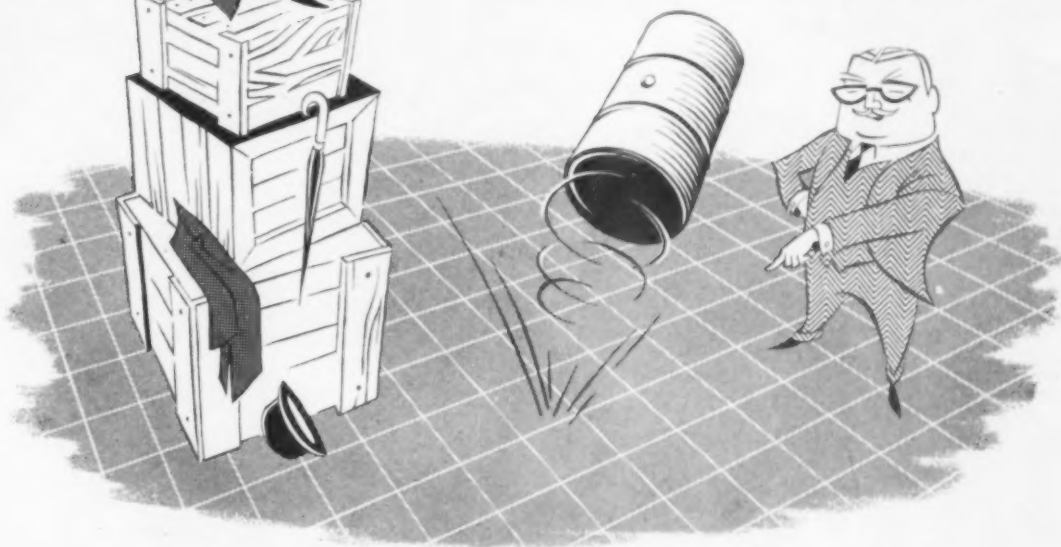
For full information about N.A.M.A. and free technical advice on asphalt for Building, apply to the Secretary:

NATIONAL ASSOCIATION OF MASTER ASPHALTERS : 202 BISHOPSGATE : LONDON E.C.2
Telephone : AVENUE 8484 **Established 1933**



"You'll find that years of rough treatment won't damage Stelcon Floors."

Where factory traffic is toughest, put down Stelcon Floors. They pay for themselves by saving costly repairs. Being level and *staying* level, they keep things smooth-running, not only inside but outside on loading bays, runways, etc. In fact, Stelcon Floors are ideal—dustless, hygienic and perfectly suited to modern mechanical handling methods.



You'll find
Stelcon
FLOORS
in every industry
—everywhere



Stelcon Anchor Steel Plates are what their name implies—steel anchored and bedded down in concrete. In fact, it would take a bomb to break up a Stelcon Floor!

From 'the 8.15' to 'the 8.15'

*concrete sufficiently hard for
almost any purpose*

In only 24 hours — concrete
made with '417 Cement' is
ready for almost any duty.

The time saved by its use
means important savings in
cost and greater productivity
of plant, shuttering, etc.

Please write for full particulars
of '417 Cement'.

'417 cement'

QUICK SETTING—EXTRA-RAPID HARDENING



THE CEMENT MARKETING COMPANY LTD

Portland House, Tothill Street, London, S.W.1.

G & T Earle Ltd., Cement Manufacturers, Hull.

The South Wales Portland Cement & Lime Co. Ltd., Penarth, Glam.

BRITISH CEMENT IS THE CHEAPEST IN THE WORLD



ESTATE
FOR THE
HOUSE

ELLARD

SLIDING DOOR GEAR



"RADIAL"
FOR THE
GARAGE

FOR
HOUSING
ESTATES

FOR THE
PRIVATE
RESIDENCE



ESTATE
FOR THE
HOUSE



"RADIAL"
FOR THE
GARAGE

ELLARD Sliding Door Gear is ideally suited for use on large housing estates and for the distinctive private residence. ELLARD "Estate" Gear is silent—easy running—troublefree, and has elegant appearance. ELLARD "Radial" Gear for garages and out-houses, provides smooth-running action, gives maximum space, and is easy to fix. Both these well-known types of ELLARD Door Gear are moderate in price and immediate delivery can be obtained from large ironmongers and builders' merchants throughout the country.

CLARKE ELLARD ENGINEERING COMPANY LTD
WORKS ROAD · LETCHWORTH · HERTFORDSHIRE

TELEPHONE 613/4

PLIMBERITE

in roof construction

at the new Radio Research Station at Datchet.

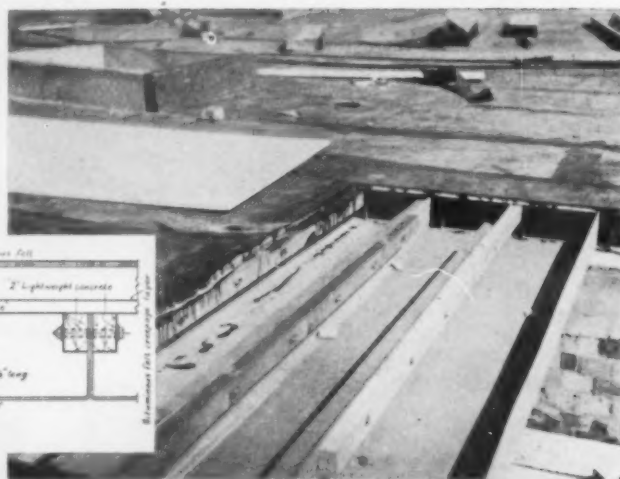
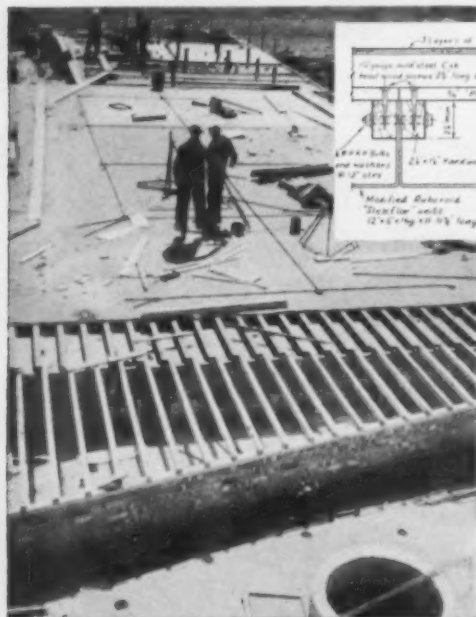
Designed by the Chief Architect's Division,
Ministry of Works, for the Department
of Scientific and Industrial Research.

Main Contractors: Messrs. A. Roberts & Co. Ltd.,
79 Eccleston Square, London, S.W.1



$\frac{3}{4}$ " PLIMBERITE Boards in the standard size 8 ft. x 4 ft. were used for decking the flat roof of the new Radio Research Station at Datchet. The photographs show a part of the 45,000 square foot roof under construction, and the drawing gives a detail of the general design of the roof structure.

Covered with three layers of bituminous felt, $\frac{1}{8}$ " PLIMBERITE was also used for covering in the roof heating ducts, over timber stud framework.



$\frac{3}{4}$ " PLIMBERITE Boards can also be used on pitched roofs as a base for the outer roof covering, usually over rafters at 16" centres.

$\frac{1}{8}$ " PLIMBERITE makes an excellent lining to a roof, screwed to the underside of the rafters (together with felt or insulating material if desired).

During roof construction of any kind with PLIMBERITE, it is important that the boards be protected from the rain until the outer roof covering is laid.

The many other uses of PLIMBERITE are dealt with in our Technical Brochure and in the PLIMBERITE REBOND PARTITIONING SYSTEM Booklet.

These publications, also prices and the names of local stockholders, will be supplied on request.

BRITISH PLIMBER LIMITED

19, Albert Embankment, London, S.E.11
Telephone: RELiance 4242

PLIMBERITE
BUILDING BOARD

FOR THE WALLS AND INTERIORS OF MODERN ARCHITECTURE



"HOLOPLAST" WALLING

has been used externally and internally in Offices, Schools, Laboratories, Public Buildings, Factories, Hospitals and Ships.

"HOLOPLAST"

can be used internally as "Movable Walls" or externally as cladding. Basically "HOLOPLAST" consists of a synthetic resin laminated cavities panel.

INSULATION

Using suitable material to fill the cavities, substantial insulation can be obtained against temperature change, or sound.

FINISH

"HOLOPLAST" panels are made in three integral colours requiring no treatment for external use and therefore no maintenance.

"HOLOPLAST" panels can also be supplied for external use with an incorporated "DECORPLAST" decorative melamine finish.

Internally "HOLOPLAST" panels can be supplied stove-enamelled or with an incorporated

"DECORPLAST" decorative melamine finish in a variety of patterns and colours. "HOLOPLAST" panels can also be supplied with wood veneers.

EASE OF ERECTION

"HOLOPLAST" installations are pre-fabricated and can be speedily erected at a low cost.

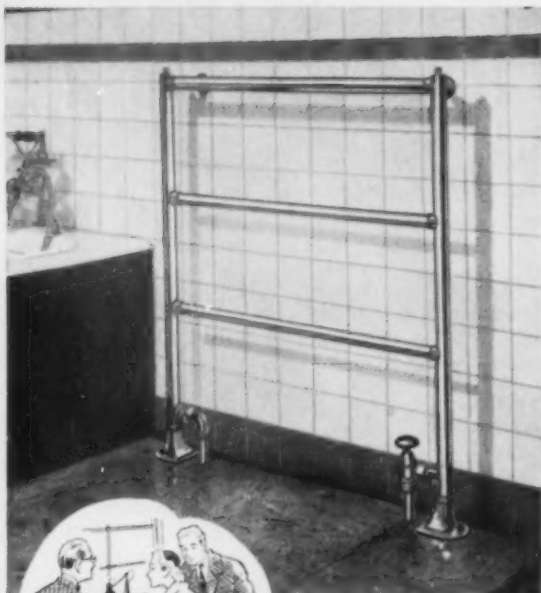


'HOLOPLAST'

THE STRUCTURAL CAVITIED PANEL

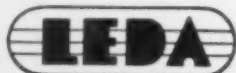
HOLOPLAST LIMITED Sales Office: 116 Victoria Street, London, S.W.1 Telephones: VICTORIA 9354/7 and 9981

HEAD OFFICE AND WORKS: NEW HYTHE, NEAR MAIDSTONE, KENT



*Specified
for the best bathrooms*

THE



HOT WATER TOWEL RAIL

A bathroom fitted with a 'Leda' hot water towel rail always wins approval—for its owner, for its designer and for its builder. This rail gives the bathroom a luxurious look, and the luxurious feeling that comes from constant dry, well-aired towels and constant warmth. The 'Leda' both in design and specification is undoubtedly the finest hot water towel rail on the market.

- *Patented method of assembly which ensures leakproof joints.*
- *Two air release valves operated by a coin—no keys to lose.*
- *High standard chromium plating on nickel.*
- *Available in two and three rail models to suit every bathroom.*
- *Individually tested at 120 lb. per square inch air pressure in hot water.*

See the Leda at the Building Centre, Store Street, London, W.C.1, or write for descriptive leaflet to:—

W. C. YOUNGMAN LIMITED

*Makers of
LEDA and MASQUE Matched Bathroom Accessories*

MANOR ROYAL, CRAWLEY, SUSSEX Telephone: CRAWLEY 1234 (5 lines)

THE SYNCHRONOME COMPANY, LTD.

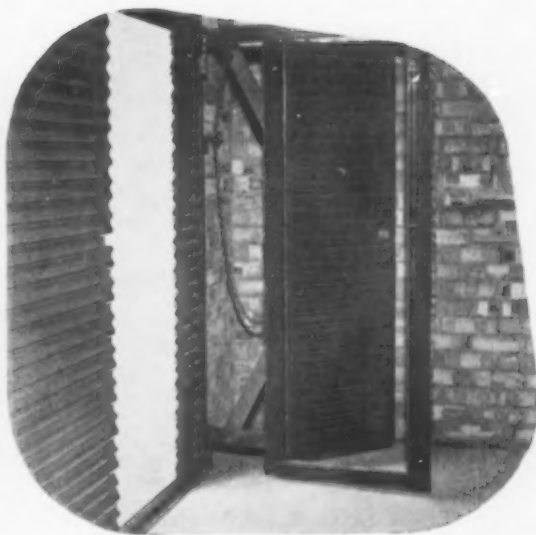
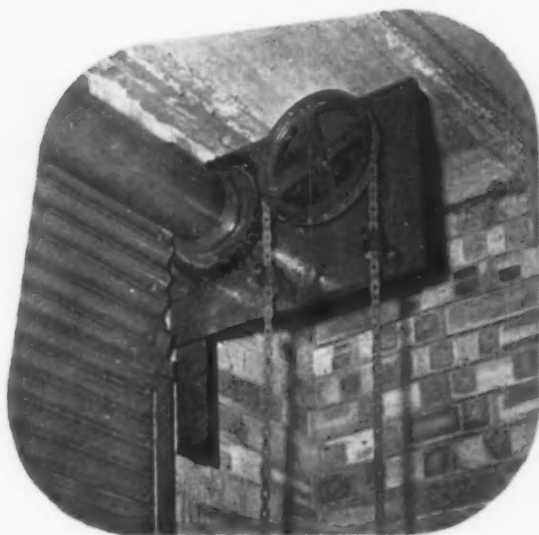
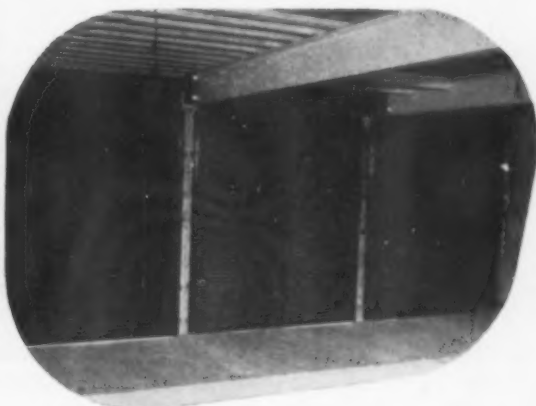
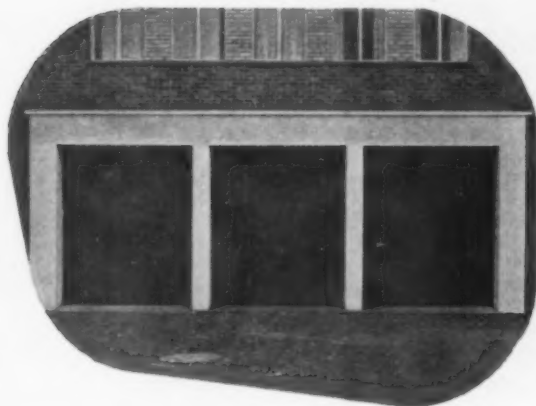
*Manufacturers of
Electric Clocks for all
purposes*

**ABBAY ELECTRIC CLOCK
WORKS,**

**WOODSIDE PLACE, ALPERTON,
WEMBLEY, MIDDLESEX**

Tel. : WEMbley 3643-4-5

ADAM SHUTTER INSTALLATION



Photographs by kind permission of Messrs. Sparrow & Clatter, A.I.A. Architects.

STEEL ● ALUMINIUM ● SOFT & HARD WOOD

*Hand operated by long arm. Hand operated by chain and gearing
or motorised*

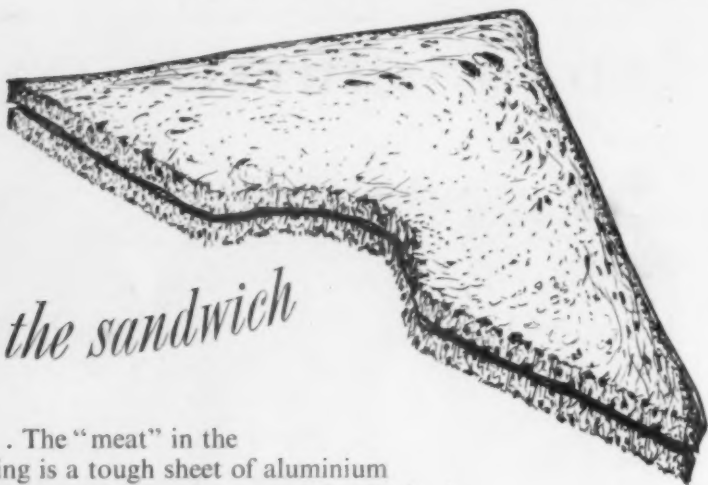
An efficient service in design, manufacture, fixing and repair

ADAM LTD

BLIND & SHUTTER DIVISION of ADAM & LANE & NEEVE LTD.

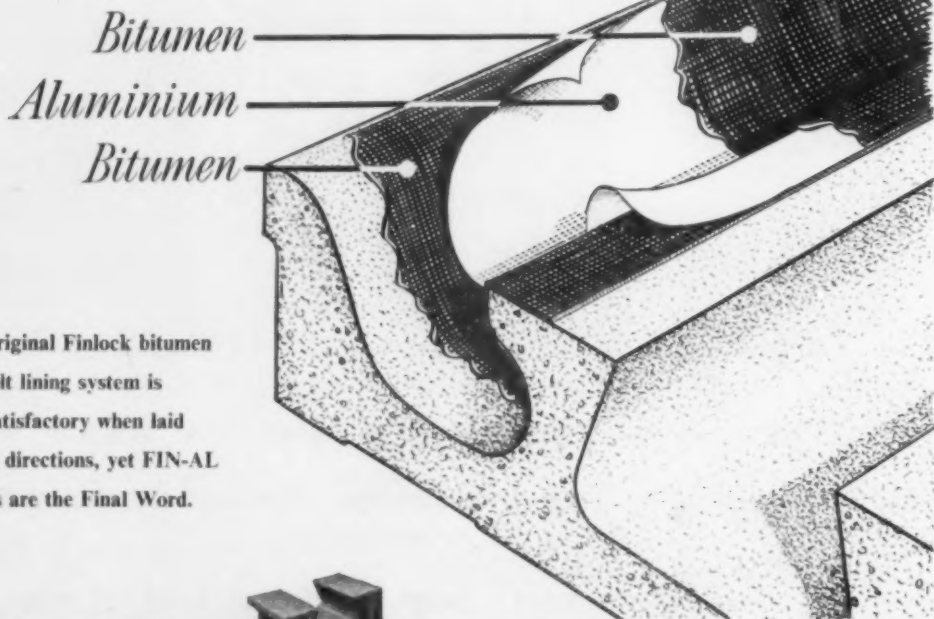
Falcon Works, Copperfield Road, London, E.3. Tel. ADVance 2345 (6 lines)

The meat in the sandwich



is the best part of it The "meat" in the Finlock metal gutter lining is a tough sheet of aluminium sandwiched between two layers of bitumen Once fixed the lining is weathertight and trouble-free, thus Eaves fitted with Finlock will have virtually no maintenance and will last as long as the walls

FIN-AL metal linings are Guaranteed for 20 years, and installed promptly on site. Finlock Service Department take over all responsibility for this work at no extra cost to the Contractor. Please ask for details.



The original Finlock bitumen and felt lining system is still satisfactory when laid to our directions, yet FIN-AL linings are the Final Word.

FINLOCK GUTTERS LTD.

Head Office: FINLOCK HOUSE, 25 FRANT ROAD, TUNBRIDGE WELLS, KENT

Telephone: Tunbridge Wells 3396/9

We deliver to all parts of England, Scotland, Wales and N. Ireland.

THE ARCHITECT & BUILDING NEWS

1 September 1955

The "Architect and Building News" incorporates the "Architect," founded in 1869, and the "Building News," founded in 1854. The annual subscription, inland and overseas, is £2 15s. 0d. post paid; U.S.A. and Canada \$9.00

Published by ILIFFE & SONS LTD., DORSET HOUSE, STAMFORD STREET, LONDON, S.E.1
Telephone: WATERLOO 3333 (60 lines). Telegrams: "ARCHITONIA, SEDIST LONDON."

Branch Offices: Coventry: 8-10 Corporation Street; Birmingham: King Edward House, New Street;
Manchester: 262 Deansgate. Tel.: Blackfriars 4412 (3 lines), Deansgate 3595 (2 lines); Glasgow: 268 Renfield Street.

THE LAYMAN

FROM time to time "The Layman" is asked for his views on Architecture, and there are occasions when he gives them unasked.

What is a "layman." Is he someone who is not an architect, or is he a person interested in the subject who has no training or skill?

He is defined as follows: "Non professional, not expert." This seems to exclude those completely uninterested and uninformed, and who, therefore, come into the "common man" category.

The layman in the sense of an amateur of architecture, provided he does not confuse the subject with archaeology, may become a critic of influence. Among writers there are a by no means negligible number who are well read in the subject and prone to give their opinions fearlessly. Sir Osbert Sitwell is one. Mr. Evelyn Waugh another.

And just as architects, so laymen range in their taste and knowledge from those who read *Domus* say, and support the extremist and latest modern, to diehards who stand by Gothic with guide book in hand and own a shelf of Batsford books.

Some time ago when the "Critics" discussed the Lansbury scheme on the air, several of the non-architects took a line of their own and quoted back at the architect members their own theory on density.

Why terrace houses, they asked, rather than high buildings with more open space?

"Horrid yellow bricks" they called the respected London stocks. They were firmly put in their place.

The problem is then to keep the layman from getting too big for his boots—a respectful admirer of and not mentor to, the professional man. To this end he has been subjected to an unprecedented number of exhibitions since the war educating him on architecture, industrial design, town planning, etc., instructing him, possibly bemusing him, but flattering him by the obvious recognition of his existence and ability to absorb information on his feet.

The art of keeping the layman in his place is largely a matter of gamesmanship. He should be kept interested

but not allowed, as we have said, to gain ascendancy.

Giants like Frank Lloyd Wright and Corbusier practice this art to perfection. The layman is hypnotised by their writings into a respectful admiration. He feels that mysteries are being revealed, veil by veil only to find that when the seventh is pulled away that nothing he had learned cushioned him against the shock of the master's latest building. He is humbled.

This, of course, is absolutely necessary. As there is said to be inside every fat man a thin man trying to get out, so inside every layman is a tyrant waiting for the chance to play the pedagogue.

The layman once leading the field, inevitably full-circles back to the library.

Changes in rules and fashions confuse him nicely. When he has become knowledgeable on the Golden Cut reply with a disquisition on the module (gamesmanship).

The full horror of the layman as top-dog has been realised in our time in Russia. In that unhappy country it was the politicians and critics who could change their ground whenever it suited them, leaving the architects hastening to catch up, for all the world like a break-away of pigeons rejoining the main flock.

The recent *rapprochement* opens up possibilities of gamesmanship in the Soviet Union. Our comrades there now have an opportunity to identify the worst excesses with Beria and other now hated defuncts, whose speeches can be read for evidence that it was their directives, whose foul purpose it was to bring the Soviet Fatherland, architecturally, into contempt. Comrade architects, never let the initiative be taken from you again!

And ourselves, we pygmies? The indifference of the public is our salvation.

What if, egged on by Professor Richardson and under a banner bearing the device "Commodity, Firmness and Delight" they advanced singing "We are the Laymen, the Laymen of England!"

Are we ready for them?

E V E N T S

A N D

C O M M E N T S

THE RADIO SHOW

The National Radio Show managed to open and be reasonably complete on Friday. I walked round in the afternoon and remembered many exhibitions unencumbered by strikes which were much less ready on opening day.

The exhibition is lively, heartening and depressing. Lively because here is a modern industry which is young and very much on the up and up. We already accept the marvels of electronics as quite ordinary but seen at Earls Court in all their different applications they are very impressive. Lively also because many of the stands are well designed and there is lots of light and colour. Unfortunately the standard exhibition banners indicating each stand though clear and useful are crudely designed and detract from the overall view from the gallery. The Show is heartening because the appearance design of so many of the sound and television sets is so good. There are exceptions but they only serve to remind one of earlier days. I attribute this improvement in appearance to the acceptance by designers of the fact that it is virtually impossible to disguise a TV set as anything else and the influence of commercial applications of both TV and sound radio. Commercial electrical equipment of all kinds is nearly always free from design trappings and this can best be seen in the control equipment for radio and TV of which there are many examples on view. Another possible reason for the improvement is that the TV and radio now exists as it were in its own right and not as a piece of furniture.

I found the show deeply depressing because of the TV blinded gaping and goggling crowds who stood, or sat everywhere staring at the hundreds of TV screen all over the building or queued to obtain the autographs of really very unimportant people whom they treated as little lower than the gods.

I am convinced that Television has a great future provided that it is adequately controlled, but I fear that before we reach the state when it can truly be called a real power for good we shall have to pass through a phase similar to that now going on in the United States. The danger is that if the phase lasts too long the mass of addicts may have lost altogether the power to think for themselves.

THE RETURN OF THE JERRY
BUILDER

The article from the Manchester Guardian on work on a building site to which I referred last week has provoked correspondence in that paper on the 'return' of jerry building. Those who know all the branches of the industry will ask when indeed jerry building went away. The stories told of bad building are as familiar as they are pathetic. The first reaction is to ask how people can be so stupid, particularly when they are enlightened enough to read the Guardian. Some of the letters make it clear that complete faith was placed in the report of the Building Societies' Surveyors. The alleged shortcomings of some of these gentlemen are alarming and shocking but it must be remembered that they are acting for the Societies and not the purchaser, although their reports would not seem to be of much use to their employers. It would be simple and inexpensive for the purchaser to ask an independent surveyor to inspect the property before purchase.

The sad part about this diddling of the ill-informed is that a considerable measure of protection against jerry-building is provided by the National House Builders' Registration Council whose members undertake to build not below the standards laid down in the Council's Specification.

If the allegations against Building Societies' Surveyors are well-founded it is monstrous that they should on the other hand cause their societies to refuse loans on perfectly good old houses by reporting adversely upon their structural state.

SOMETHING TO LOOK FORWARD
TO

Sir Jacob Epstein's statue 'Christ in Glory' for the restored Llandaff Cathedral will not be shown publicly before it is fixed in the Cathedral. Those who know and admire Sir Jacob's 'Madonna & Child' in Cavendish Square will eagerly await the unveiling.

Sir Jacob has received another important commission, to design the war memorial group for David Aberdeen's T.U.C. Headquarters in Great Russell Street. You will remember that a limited competition held last year failed to produce what was wanted.

HERE AND THERE

1. Belgrave Square has now followed the example of Grosvenor Square and has large raised islands at its four corners. These islands are a little better than the temporary barriers which stood there previously and they undoubtedly make motoring in the Square safer but aesthetically they are beastly. Could they not have groups of pots of flowers. If a landscape architect had been called in in the first place we might have had some pretty planting here but it is now too late for that.

2. Some people like us to think that the Cinema is on the way out. I have to report that the Odeon on



The new Mormon Temple in Berne, Switzerland which is to be dedicated on 11th September. The ground-breaking ceremony took place last Saturday at Lingfield, Surrey of the first Mormon Temple in Britain, designed by Mr. Edward O. Anderson, supervising architect, Sir Thomas Bennett, F.R.I.B.A.

the site of Arthurs Stores in Bayswater, is nearly ready. The main body of the building was put up before the war and latterly was used as a government egg store. With the old Shepherds Bush Pavilion re-opened we shall have two virtually post-war cinemas in London.

3. My old friend Major London Bottleneck is on the move. The remaining old buildings belonging to John Barker & Co. on the south side of Kensington

High Street are nearly down. The new building will be set back and will enable the road at the junction of Kensington Church Street to be considerably widened.

4. There is as yet no news of the future of the Gaiety Theatre site. The English Electric Company, possibly pre-occupied with getting to New York and back in a day, do not appear to have decided what to do about Mr. Gordon Tait's prize-winning design.

THE TRETOL DESIGN

Congratulations to all concerned for so rapidly clearing the air after the criticisms of the conditions of this competition which appeared here and elsewhere. The letter published last week ensures a very much more equal start for all competitors.

RESTORING THE SHELDONIAN

The Sheldonian Theatre at Oxford is badly in need of reconstruction, the stonework is in particularly bad condition. It now appears that the present building is very unlike the building which Wren built for it has been much altered since. The most important change, says the Times, took place in the nineteenth century when the roof was entirely reconstructed. The original had no camera surmounting it.

Wren designed a much grander building, but his estimate of £25,000 was cut to £14,000.

The University authorities have a difficult decision to make. Should they restore the building as it stands or as Wren built it. There is certain to be lively debate among all those who are interested and I only hope that the public debate will be opened *before* the decision is taken.

I myself wonder whether the best course would not be to build to Wren's original design and that really would be something for Professor Richardson to get his teeth into. Let us hope that the eminent architect referred to in the Times report is indeed the P.R.A.

ABNER

CORRESPONDENCE

Youth at the Elm

Sir,—With reference to Abner's comments in this week's "Architect," I think his attitude is adding insult to injury.

I did not realise that my letter was an "angry" one; it is a pity you did not publish it so that your readers could judge for themselves.

Abner missed the point in my letter which was that he categorically ranged himself on the side of Sir Hugh Casson in a controversy with the Kensington Borough Council, after he had already admitted that he was not *au fait* with the facts.

It is this attitude that I object to,

not the opinions of Abner, and I consider that he has deliberately evaded the point at issue.

I am, etc.,
JOHN L. DAVIES, M.B.E.
Engineer and Surveyor.

* Mr. Davies' letter of August 18.

Sir,—In the "Architect and Building News" of August 18, I have read Abner's comments on "Youth at the Elm," or "You Never Can Tell."

I note that although Abner has "no inside information on the slightly comical situation" he states (and I quote): "I am prepared to back Sir Hugh's taste against that of the K.B.C."

I do not know the facts either of

this case, therefore I am not prepared to offer any judgment. One thing I will say, however, is that Abner's attitude has confirmed what I have thought for a very long time, namely his intense hostility to Local Government and particularly its engineering side. I sometimes wonder why we bother to keep on taking your publication when such unfair remarks are made by Abner. Surely he should give his views on matters with which he is completely *au fait*, and realise that some of your readers at least have enough intelligence to form their own conclusions.

JOHN L. DAVIES, M.B.E.
Engineer and Surveyor.

E V E N T S

A N D

C O M M E N T S

THE RADIO SHOW

The National Radio Show managed to open and be reasonably complete on Friday. I walked round in the afternoon and remembered many exhibitions unencumbered by strikes which were much less ready on opening day.

The exhibition is lively, heartening and depressing. Lively because here is a modern industry which is young and very much on the up and up. We already accept the marvels of electronics as quite ordinary but seen at Earls Court in all their different applications they are very impressive. Lively also because many of the stands are well designed and there is lots of light and colour. Unfortunately the standard exhibition banners indicating each stand though clear and useful are crudely designed and detract from the overall view from the gallery. The Show is heartening because the appearance design of so many of the sound and television sets is so good. There are exceptions but they only serve to remind one of earlier days. I attribute this improvement in appearance to the acceptance by designers of the fact that it is virtually impossible to disguise a TV set as anything else and the influence of commercial applications of both TV and sound radio. Commercial electrical equipment of all kinds is nearly always free from design trappings and this can best be seen in the control equipment for radio and TV of which there are many examples on view. Another possible reason for the improvement is that the TV and radio now exists as it were in its own right and not as a piece of furniture.

I found the show deeply depressing because of the TV blinded gaping and goggling crowds who stood, or sat everywhere staring at the hundreds of TV screen all over the building or queued to obtain the autographs of really very unimportant people whom they treated as little lower than the gods.

I am convinced that Television has a great future provided that it is adequately controlled, but I fear that before we reach the state when it can truly be called a real power for good we shall have to pass through a phase similar to that now going on in the United States. The danger is that if the phase lasts too long the mass of addicts may have lost altogether the power to think for themselves.

THE RETURN OF THE JERRY BUILDER

The article from the Manchester Guardian on work on a building site to which I referred last week has provoked correspondence in that paper on the 'return' of jerry building. Those who know all the branches of the industry will ask when indeed jerry building went away. The stories told of bad building are as familiar as they are pathetic. The first reaction is to ask how people can be so stupid, particularly when they are enlightened enough to read the Guardian. Some of the letters make it clear that complete faith was placed in the report of the Building Societies' Surveyors. The alleged shortcomings of some of these gentlemen are alarming and shocking but it must be remembered that they are acting for the Societies and not the purchaser, although their reports would not seem to be of much use to their employers. It would be simple and inexpensive for the purchaser to ask an independent surveyor to inspect the property before purchase.

The sad part about this diddling of the ill-informed is that a considerable measure of protection against jerry-building is provided by the National House Builders' Registration Council whose members undertake to build not below the standards laid down in the Council's Specification.

If the allegations against Building Societies' Surveyors are well-founded it is monstrous that they should on the other hand cause their societies to refuse loans on perfectly good old houses by reporting adversely upon their structural state.

SOMETHING TO LOOK FORWARD TO

Sir Jacob Epstein's statue 'Christ in Glory' for the restored Llandaff Cathedral will not be shown publicly before it is fixed in the Cathedral. Those who know and admire Sir Jacob's 'Madonna & Child' in Cavendish Square will eagerly await the unveiling.

Sir Jacob has received another important commission, to design the war memorial group for David Aberdeen's T.U.C. Headquarters in Great Russell Street. You will remember that a limited competition held last year failed to produce what was wanted.

HERE AND THERE

1. Belgrave Square has now followed the example of Grosvenor Square and has large raised islands at its four corners. These islands are a little better than the temporary barriers which stood there previously and they undoubtedly make motoring in the Square safer but aesthetically they are beastly. Could they not have groups of pots of flowers. If a landscape architect had been called in in the first place we might have had some pretty planting here but it is now too late for that.

2. Some people like us to think that the Cinema is on the way out. I have to report that the Odeon on



The new Mormon Temple in Berne, Switzerland which is to be dedicated on 11th September. The ground-breaking ceremony took place last Saturday at Lingfield, Surrey of the first Mormon Temple in Britain, designed by Mr. Edward O. Anderson, supervising architect, Sir Thomas Bennett, F.R.I.B.A.

the site of Arthurs Stores in Bayswater, is nearly ready. The main body of the building was put up before the war and latterly was used as a government egg store. With the old Shepherds Bush Pavilion re-opened we shall have two virtually post-war cinemas in London.

3. My old friend Major London Bottleneck is on the move. The remaining old buildings belonging to John Barker & Co. on the south side of Kensington

High Street are nearly down. The new building will be set back and will enable the road at the junction of Kensington Church Street to be considerably widened.

4. There is as yet no news of the future of the Gaiety Theatre site. The English Electric Company, possibly pre-occupied with getting to New York and back in a day, do not appear to have decided what to do about Mr. Gordon Tait's prize-winning design.

THE TRETOL DESIGN

Congratulations to all concerned for so rapidly clearing the air after the criticisms of the conditions of this competition which appeared here and elsewhere. The letter published last week ensures a very much more equal start for all competitors.

RESTORING THE SHELDONIAN

The Sheldonian Theatre at Oxford is badly in need of reconstruction, the stonework is in particularly bad condition. It now appears that the present building is very unlike the building which Wren built for it has been much altered since. The most important change, says the Times, took place in the nineteenth century when the roof was entirely reconstructed. The original had no camera surmounting it.

Wren designed a much grander building, but his estimate of £25,000 was cut to £14,000.

The University authorities have a difficult decision to make. Should they restore the building as it stands or as Wren built it. There is certain to be lively debate among all those who are interested and I only hope that the public debate will be opened *before* the decision is taken.

I myself wonder whether the best course would not be to build to Wren's original design and that really would be something for Professor Richardson to get his teeth into. Let us hope that the eminent architect referred to in the Times report is indeed the P.R.A.

ABNER

CORRESPONDENCE

Youth at the Elm

Sir,—With reference to Abner's comments in this week's "Architect," I think his attitude is adding insult to injury.

I did not realise that my letter was an "angry" one; it is a pity you did not publish it so that your readers could judge for themselves.*

Abner missed the point in my letter which was that he categorically ranged himself on the side of Sir Hugh Casson in a controversy with the Kensington Borough Council, after he had already admitted that he was not *au fait* with the facts.

It is this attitude that I object to,

not the opinions of Abner, and I consider that he has deliberately evaded the point at issue.

I am, etc.,

JOHN L. DAVIES, M.B.E.
Engineer and Surveyor.

* Mr. Davies' letter of August 18.

Sir,—In the "Architect and Building News" of August 18, I have read Abner's comments on "Youth at the Elm," or "You Never Can Tell."

I note that although Abner has "no inside information on the slightly comical situation" he states (and I quote): "I am prepared to back Sir Hugh's taste against that of the K.B.C."

I do not know the facts either of

this case, therefore I am not prepared to offer any judgment. One thing I will say, however, is that Abner's attitude has confirmed what I have thought for a very long time, namely his intense hostility to Local Government and particularly its engineering side. I sometimes wonder why we bother to keep on taking your publication when such unfair remarks are made by Abner. Surely he should give his views on matters with which he is completely *au fait*, and realise that some of your readers at least have enough intelligence to form their own conclusions.

JOHN L. DAVIES, M.B.E.
Engineer and Surveyor.

The Faculty of Architects and Surveyors

South Wales and Monmouthshire branch are holding a Ladies' Night and informal dinner at the Esplanade Hotel, Porthcawl, on Wednesday, September 14. Those interested should get in touch with the Hon. Secretary, G. F. Grizelle, Esq., F.F.S., 113 Walter Road, Swansea, Glam. Tel.: Swansea 59153.

Sussex branch will be visiting the works of Gypsum Mines Ltd., at Robertsbridge, on Tuesday, September 13. Those interested should contact the Hon. Secretary, P. D. Westbrook, Esq., A.F.S., 9 Aglaria Road, Worthing, Sussex.

Plumbing Practice in Scotland

The Scottish Federation of Plumbers and Domestic Engineers (Employers') Associations, has asked the Prime Minister to indicate whether he approves of differing practices in Scotland as against England, and to be specific on the application of firm price tendering in Scotland in face of the known facts. This further request is the latest step in the dispute between the trade and the local authorities in Scotland—which are insisting, with the Secretary of State for Scotland's support, on firm prices.

In a letter to the Prime Minister recently attention was drawn to the "extremely serious position" in which the plumbing trade in Scotland had been placed as a result of the policy of firm price tendering as to materials for plumbing contracts. When the recommendation to local authorities—that they consider the commission of the Variation of Price (Materials) clause from all building contracts for which they were responsible—was issued the federation made immediate representations to Commander Galbraith (Lord Strathclyde) then Under-Secretary of State. The federation then stated their full support for firm prices as the best and most economical method of tendering and indicated that they would welcome a return to firm price tendering at the earliest possible date. They maintained however, that that method of tendering was not yet a practical possibility for the plumbing trade.

Lord Strathclyde stated that he could not make any modification in the recommendation, and indicated that it was up to the plumbing contractor to bring pressure to bear on suppliers in order to obtain firm prices.

It was pointed out in the letter to the Prime Minister that it was not possible in the prevailing conditions for the federation and their members to do as suggested by Lord Strathclyde. There was not, in the plumbing trade, any sufficient measure of stability or indeed any possibility of

assessing future fluctuations in prices with any degree of accuracy, for such tendering to be a reasonable commercial proposition such as the plumbing trade would be only too willing to shoulder. Further it was emphasised the policy was not yet being applied in England and Wales, nor by the U.K. ministries in Scotland.

A reply from No. 10 Downing Street, dated August 5 said: "The Prime Minister has carefully considered the representations made by your federation, and at Sir Anthony Eden's request the Secretary of State for Scotland has reviewed the whole position. In the light of experience since his circular was issued the Secretary of State does not feel he would be justified in present conditions in modifying the advice which he has given to the local authorities. The local authorities have generally welcomed and adopted this advice and local authority representatives have recently informed the Secretary of State for Scotland that they intend to continue to invite tenders for building work on this basis.

"Sir Anthony Eden would be sorry to send you a disappointing reply, but, in the circumstances he does not feel able to intervene further."

TIMBER NOTES

TIMBER IMPORTERS are now receiving large quantities of softwood. Not only were large contracts placed for delivery in this period of late summer, but there is also the backlog of shipments from the dock strike. According to contracts already placed there should be over 1,700,000 standards received at the ports this year, which will not only cover present demands from the users but also increase the softwood stocks held in the country at the end of the year.

Little buying for this year is now being completed. Most of what is being bought is Douglas fir and hemlock from Canada and Russian redwood and whitewood. There is a slight price advantage with these timbers at the moment, due to the high freight rates from Sweden and Finland. The Russian prices are the same as they were in February, and as they are quoted c.i.f. this means that they have really shown a slight fall, for the cost of shipment over the past six months has certainly risen appreciably. Unsorted Archangel redwood battens are priced at £95 10s. a standard. Whitewood is ten pounds a standard cheaper. This has to be set against the Swedish redwood unsorted price of £86 a standard f.o.b., with a freight of at least £13 to be added. Yet the 40,000 standards of Russian wood at these bargain prices took a long time to sell, a sure indication of the overloading of timber which the importers have suffered. However, the fact that cheaper softwood is not selling rapidly

should not be taken to indicate a drop in prices is imminent; supply and demand on a world level are so evenly balanced that such a move is most unlikely.

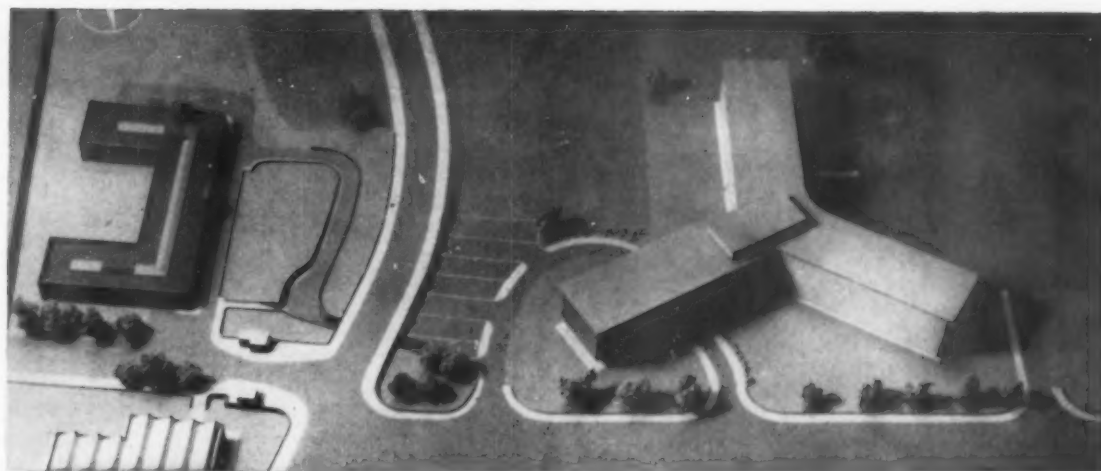
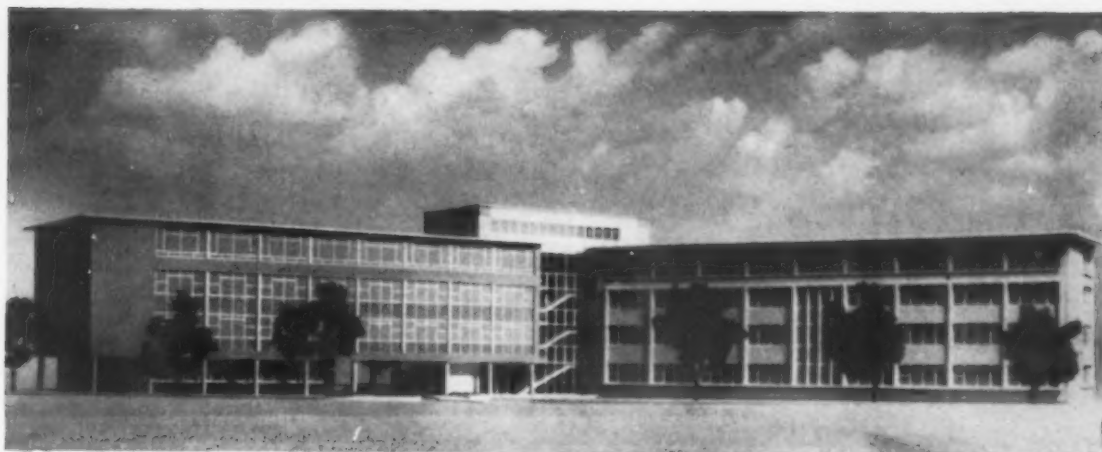
Some sales are being made at the moment by the trade at prices which are a little below those replacement values for the timber. This shows a need to sell as large stocks arrive, in many cases the importers and merchants being badly in need of storage space. On the whole, however, the softwood user must look to a small rise in prices over the next month or two. Higher freights — at least £5 a standard on Swedish and Finnish goods cannot be absorbed by the trade, so some rise in prices on the retail level is inevitable.

This rising freight market is also affecting the hardwood market, where the lighter hardwoods, such as obeche, now attract a higher freight charge on the run from West Africa. Japanese oak prices are a little easier, but the dollar hardwoods are at peak prices. These values are influenced most strongly by the high demand for hardwoods in North America, a demand which is continuing.

Perhaps a rather different picture can be painted for the plywood trade. The shippers are not offering stocks at rates which are any lower (the Finns and Russians have sold almost all they have for export this year), but the pile-up of stocks in the plywood warehouses is now quite a serious business. The main users of plywood in this country, the furniture manufacturers, have been going through a thin time and buying much smaller quantities of plywood, so the stock holders must create demand in some way. This has already led to weak prices in some cases, and the trend may be accentuated shortly. Anyway, there is little chance that prices will increase for this material.

An interesting development has come from Japan, where plywood with one face of bamboo is now being produced. At the moment it is something of a novelty, but several architects have shown much interest in it as a design material for the unusual effect. The Japanese plywood shippers have formed an association and have fixed selling prices slightly higher than those which have prevailed this year, but the opinion in the trade here is that higher prices will not be accepted.

Hardboard stocks are excellent, and supplies of insulation board are generally good in most parts. This applies to both the imported and home-produced article. According to the importers the price of hardboard should go up a little in view of the higher costs to the importers through freight charges and more costly overheads, but so far there has been little attempt to push prices higher, and some sellers are still to be found disposing of stocks at cut prices. If there is any increase this autumn, it should be small.



NEW HEADQUARTERS FOR I.C.I. PAINTS DIVISION

Work will start shortly on a 4½-acre site in Wexham Road, Slough, where a new office building is to be erected for the headquarters departments of I.C.I.'s Paints Division. The new building will be across the road from the Division's Slough factory, with which it will be connected by a tunnel. The building will have a "Y" shaped plan which has advantages for office organisation and minimises interference with light and transmission of noise between wings. The building will have a total floor area of over 70,000 square feet, arranged on four floors, and it is planned to accommodate a staff of approximately 500. It is expected that the headquarters will be ready for occupation early in 1957.

Oxford Development Plan Approved

The Minister of Housing and Local Government has approved with modifications the development plan for the City of Oxford. The plan, as approved, will be deposited in the Town Hall, Oxford, for inspection by the public.

Presidential Tour

The President, Mr. W. R. Brackett,

O.B.E., T.D., B.Sc., and the Secretary, Brigadier A. H. Killick, C.B.E., D.S.O., M.C., M.A., of the Royal Institution of Chartered Surveyors left England by air on August 30 for an official tour of the Branches of the Institution in Africa.

F.A.S. Forthcoming Examinations

The Faculty of Architects and

Surveyors will be holding professional examinations from November 14 to 18, 1955 (inclusive), in all sections.

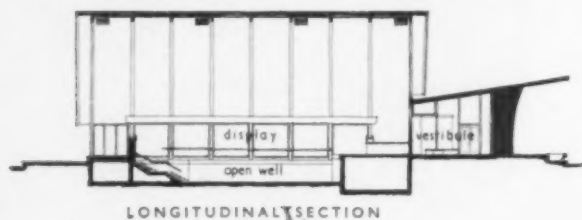
The examinations will be held in London and certain provincial centres. Applications from candidates for permission to sit must be with the Secretary not later than Monday, October 3, 1955.

All information obtainable from the Secretary, F.A.S., 58, Gloucester Place, London, W.1. (Welbeck 9966).

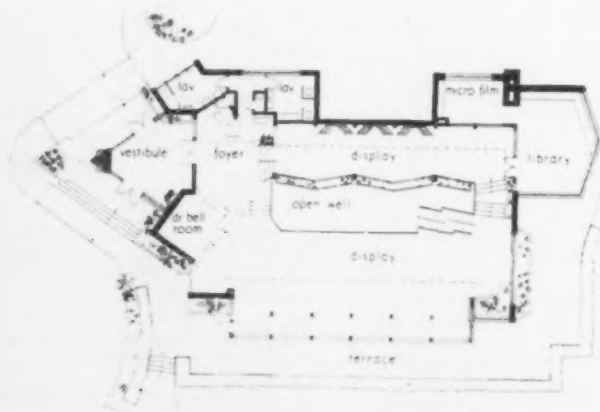


**Alexander Graham Bell Memorial Museum,
Baddeck, Nova Scotia**

architect:
O. HOWARD LEICESTER, F.R.I.B.A.
associate architects:
A. CAMPBELL WOOD & ASSOCIATES

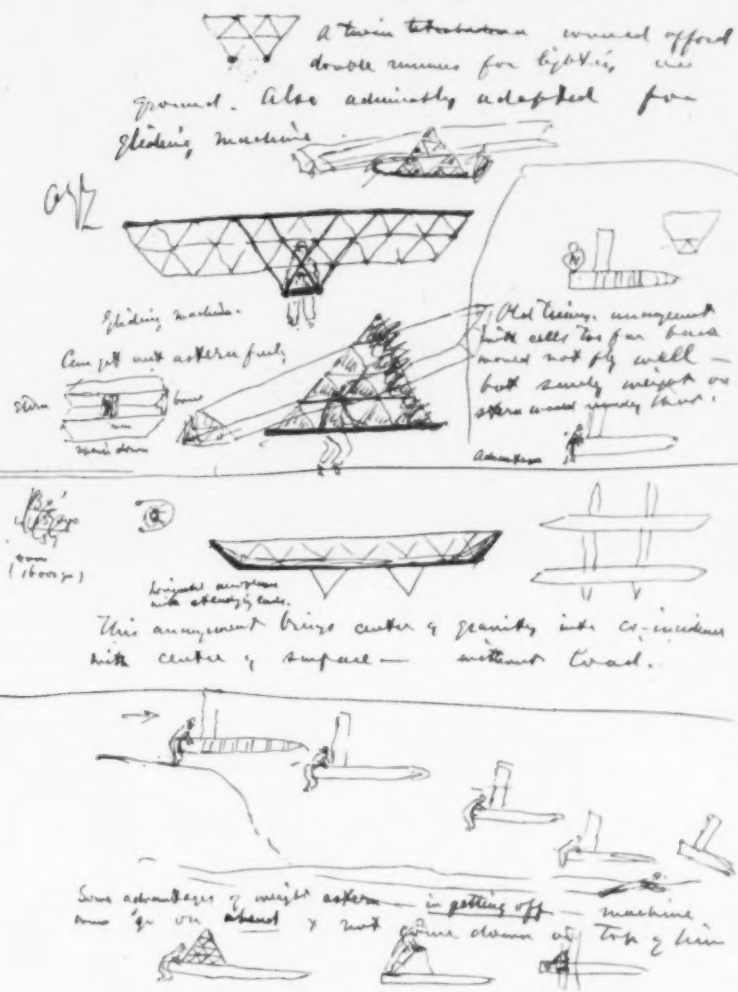


LONGITUDINAL SECTION



PLAN, Scale: 1 in. = 40 ft.

1903 July 11 — Bath — at B.B.S.



A page from Dr. Bell's diary illustrating the inspiration for the basic design.



Entrance elevation

Memorial Museum

THE construction at Baddeck, Nova Scotia, of the Alexander Graham Bell Memorial Museum to honour the memory of the great inventor and to protect for posterity his promising works was recently completed. The plan and section of this national historic site of international importance are based on a tetrahedral motif which recalls Dr. Bell's use of Platonic tetrahedrons in constructing many-celled kites as part of his studies of mechanical flight.

The museum occupies a commanding position within a mile and a half of the place where Dr. Bell lived during his later years on Bienn Breagh overlooking Bras D'Or Lakes in Cape Breton Island. The land for the museum was donated by the Government of Nova Scotia.

Dr. Bell is best remembered for his invention of the telephone. During the years 1893 to 1922 at Baddeck he carried on many and varied experiments in other fields that were of high importance. They included experiments in producing multiple births in sheep, discoveries akin to the action of the present-day Geiger counter for the detection of metallic bodies underground, and the design and construction of the first heavier-than-air machine to be successfully flown in the British Empire.

STRUCTURE

The building is timber framed on reinforced concrete foundations and the main timbers are of laminated construction. The walls, of which a large portion is glazed, are built with a local squared rubble known as Bouladarie stone. The windows, are all double glazed and in timber frames; above a certain level a special green tinted glass has been used to minimise heat from the sun. The roof is finished with green Cumberland slates.

Internal finishes are simple; timber is left with its natural finish, the floors are in the main asphalt tiles, rubber or terrazzo, and gay colours were used throughout on the flat surfaces. The building includes a small internal flower garden at one end of the display area.

Another of the features of the internal display is the method of illustrating the pages of Dr. Bell's diary which have been etched on glass larger than life size by the London Sand Blast Decorative Glass Works Ltd. The museum is completely air conditioned.

The basic theme in the design of the proposed museum was developed by O. Howard Leicester, F.R.I.B.A., Chief Architect of the Department of Northern Affairs and National Resources. Members of the firm of A. Campbell Wood, F.R.A.I.C. of Montreal were associate architects, and the consulting engineers were Wood, McAdam and Magor, of Montreal.



Two Houses at St. Mary Platt, Kent

Architects: GEOFFREY UFFINDELL & KENNETH HOLGATE, A.A.R.I.B.A.

THESE houses were designed for the architect's own use, with a total floor area of 900 sq ft at ground level, and are built on a hillside on sandy soil. The contract price was £2,300 excluding site works and erection time for the two structures 12 weeks and 18 weeks respectively. All main services are provided.

The sleeping, study, toilet, storage and cooking areas were planned as minimum areas to allow a maximum space for living. The apparent volume of the latter is further increased visually by the open planning of the hall and kitchen units and floor to ceiling glazing on two sides. The main feature of the living area is the free standing stone fireplace which is equipped with a convector fire and back boiler (for radiator heating). Controlled air flow is brought to the fire by ducts in the floor slab. Physical separation of the hall and living area is by a $\frac{1}{4}$ in plate-glass

screen between the fireplace and the external glazing. The terrazzo hall floor finish extends through the glass division to form the hearth to the fireplace and enhances the visual connection.

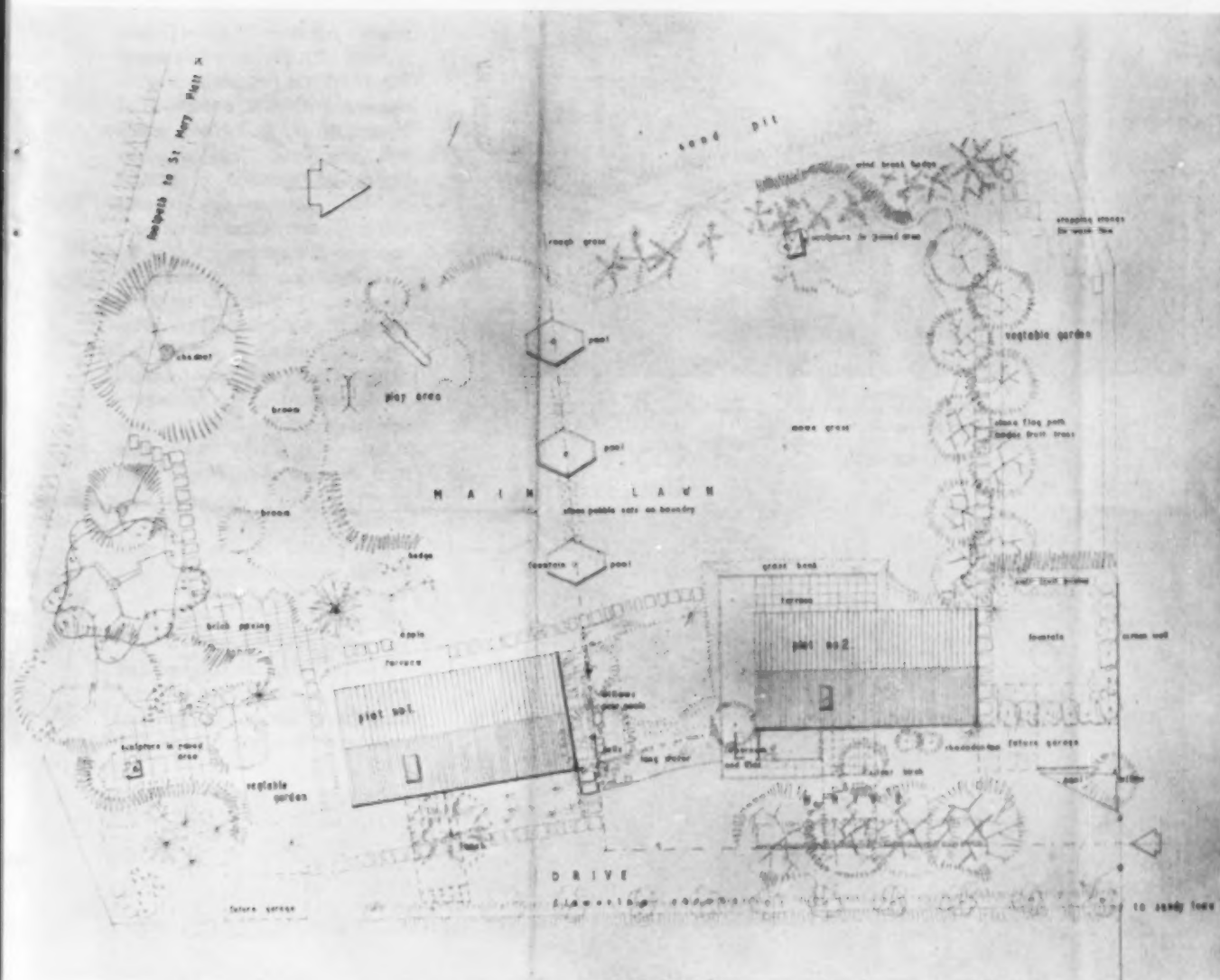
There is a large open hatch between the dining area and the kitchen, this serving also as a breakfast bar. All the kitchen equipment was designed by the Architects and is finished in Hon-

duras Mahogany on exposed faces with 1-16 in Wareite veneered working surfaces and $\frac{1}{4}$ in doors in white Wareite. A built-in 6 cu ft refrigerator with ventilated cupboard above and vegetable storage beneath is provided. The refrigerator compressor unit is mounted in the roof. Hot water and heating is supplied by a solid fuel boiler.

All window frames are pur-

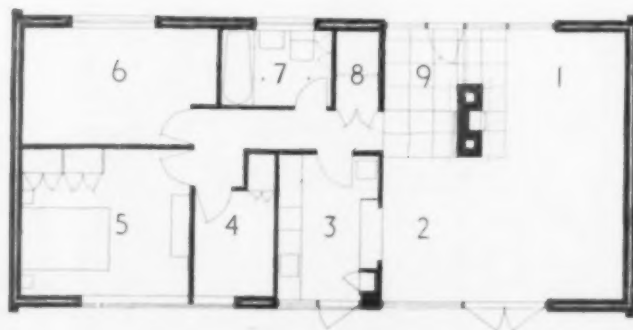


East elevation, showing entrance door and glazing to E. side of living room and hall.



PLOT 1. 1: LIVING ROOM. 2: DINING AREA. 3: KITCHEN. 4: STUDY. 5: BED 1. 6: BED 2. 7: BATHROOM. 8: STORE. 9: ENTRANCE HALL.

PLOT 2. 1: LIVING ROOM. 2: DINING AREA. 3: KITCHEN. 4: CHILD'S ROOM. 5: BED 1. 6: BED 2. 7: W.C. 8: BATHROOM. 9: STORE. 10: ENTRANCE HALL.



DOMUS.



SYRTIS.

SCALE: 1 in = 12 ft



View of W. elevation from below terrace. Inset wall panel is colour washed pink; woodwork painted white or in "Iroko" finished in plastic polish. Bricks on end walls; Lavender Dunbriks; Eaves soffit white.



Above: Detail of Canopy over W. elevation. White enamelled steel rod cantilever brackets drop into steel eyes in window verticals.

Below: Interior view from L.R. Fireplace in random stone, precast concrete surround painted white. Hearth and Hall floor in black terrazzo with white plastic strips. Wood strip floor in Meranti; ceiling—flame red; Walls—mist grey and lemon yellow.

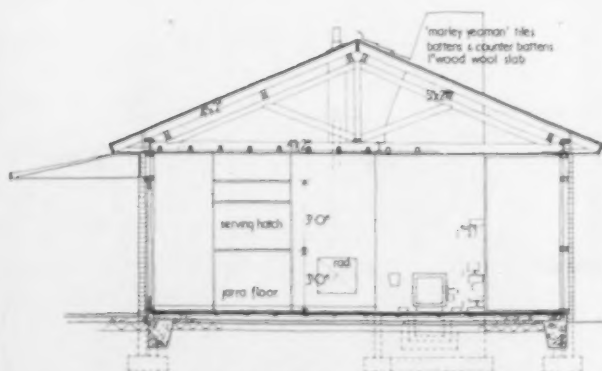
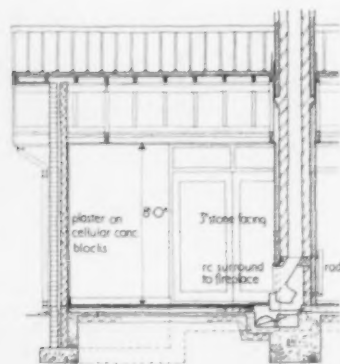


posely made in "Iroko" and finished with plastic polish, opening sashes are purposely made in metal. With the exception of glazed doors to kitchen, study and hall, flush doors are used throughout, faced in "Lionide" on the corridor side. Ironmongery throughout is natural anodised aluminium.

Wall surfaces are finished with wallpaper or washable water paint, all architraves and skirtings are finished in white gloss. Skirtings and wall surfaces subject to heavy wear, in the kitchen, are finished in "Lionide."

Externally cavity walls are used the outer skin being cellular concrete facings, the inner skin cellular concrete blocks. Concrete tiles are used on the roof over battens, counter battens, felt and lin wood wool slab. R.C. foundations and a concrete floor slab were used.

Floor finishes are tongued and grooved strip hardwood in living area, black terrazzo in hall, and elsewhere "Semastic" tiles.



SECTIONS THROUGH BOTH HOUSES
SCALE: 1 in = 8 ft

All bedroom fittings were designed by the architects.

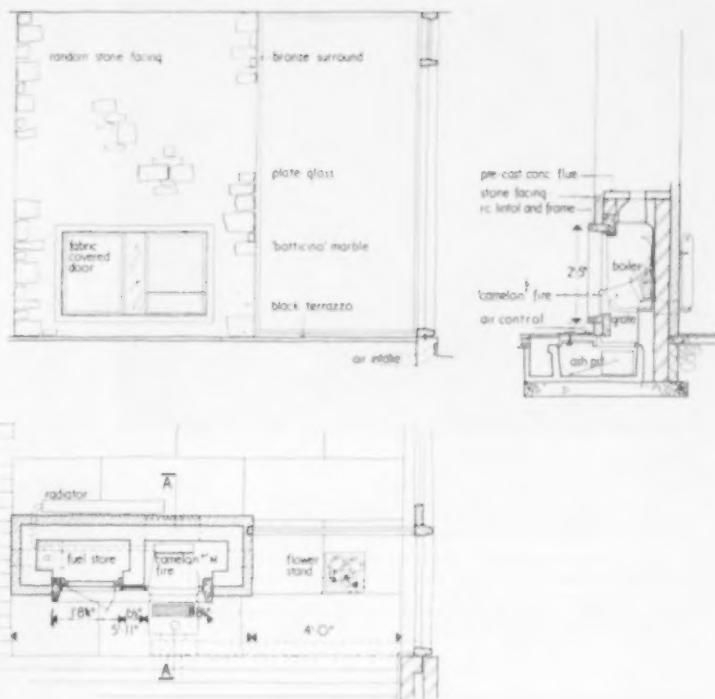
The sites are being laid out as one complete garden with formal paving and planting and lawns contrasting with wild vegetation adjacent to the children's play area.

It was decided at the outset to restrict the area of the houses to 900 sq ft or less in order that a high standard of finish and equipment could be provided. The houses are identical in structure, only minor variations being made in toilet, bedroom accommodation and fenestration.

HOUSES AT ST. MARY PLATT

Contractor: Messrs. Hyder & Sons (Builders) Ltd.

Bricks: Dunbrik Brick Co. Tiles: Marley Tile Co. Metal Windows: James & Co. Ltd. Sanitary Ware: Stitsons Sanitary Fittings; Fred Hodge Ltd. Ironmongery: Dennis Waring and Co. Ltd. Floor Tiles: Semtex Ltd. Convector Fire: Camelon Iron Foundry. "Lionide" Plastic Wall and Door Finishes: James Williamson & Co. Ltd. Wallpapers: John Line and Sons Ltd. Wood Flooring: Mankin. Terrazzo: Brockwell Masain. Paving: Noelite Ltd.



"SYRTIS" FIREPLACE DETAILS. SCALE 1 in = 4 ft

View into living room and Hall from West Terrace.



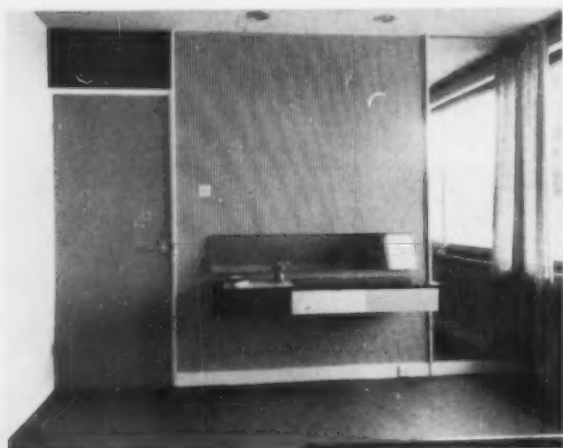


Houses at St. Mary Platt

ARCHITECTS: GEOFFREY UFFINDELL
& KENNETH HOLGATE

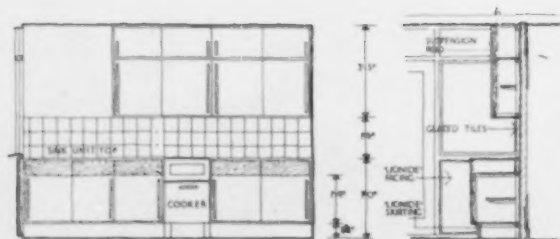
View through kitchen hatch into Living Room. Stone fireplace to left; recessed curtain track in ceiling runs full width of room; recessed light fittings, anodised "Brass" finished.

Below: South wall of Bedroom 1. Dressing fitment cantilevered from wall, finished mahogany with red, white and yellow celluloid drawer fronts. Full height mirror to right visually extends window and garden view. Carpet—red; wallpaper—midnight blue and white stripe; door—grey "Lionide." Left-hand wall—lilac; ceiling—white.



Above: View into Bedroom 1 and passage. Wardrobe unit in Gaboon ply finished with plastic polish. All doors finished deep red on Hall side and white on room side.

Below: View into kitchen through hatch.



KITCHEN DETAIL, BOTH HOUSES





Architect's Own House, Edgbaston, Birmingham

designed by A. G. SHEPPARD FIDLER, CITY ARCHITECT, BIRMINGHAM
in association with LEONARD MULTON

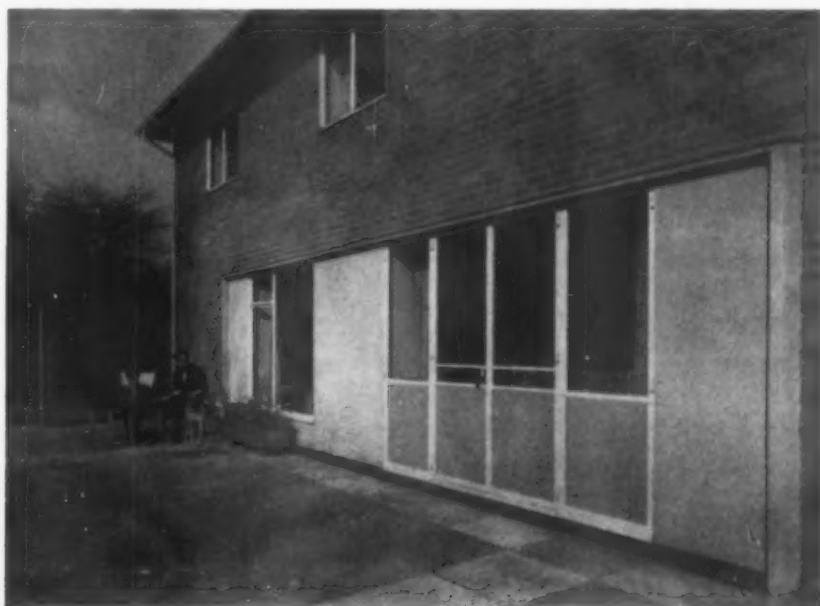
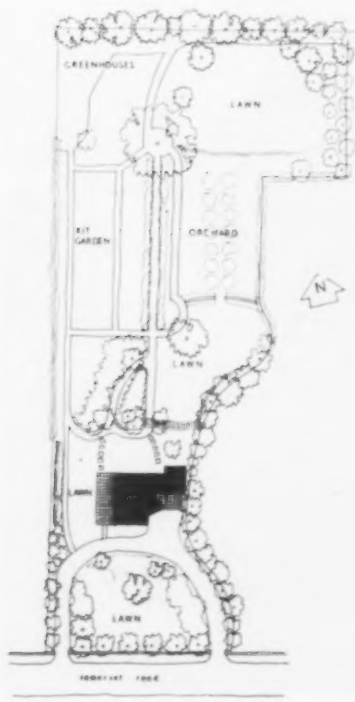
THIS house is built on the matured site of an old Victorian house in Edgbaston. The old basement walls had crumbled, owing to long exposure to the weather, and the basement was filled with colliery shale, rolled and consolidated to form an inert foundation. The house sits on a 9in reinforced concrete raft carefully designed to accommodate heating ducts, etc.

The living-room and dining-room form one large room for entertaining and may be divided by a curtain. A wide hatch opens between the dining-room and kitchen to form

a buffet counter. The architect required a small study cut off from the rest of the ground floor accommodation.

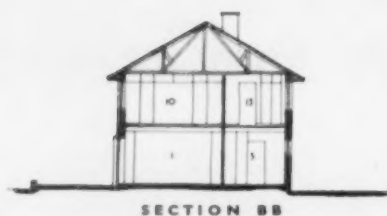
A feature of older houses in the area is the "covered yard" and a modern interpretation of this feature has been introduced as a general utility room connecting the kitchen with the garage. This room contains the central heating boiler, fuel stores, meter cupboard, etc., and has a long window overlooking the garden.

Each of the four bedrooms has built-in wardrobes and two have fitted wash basins.

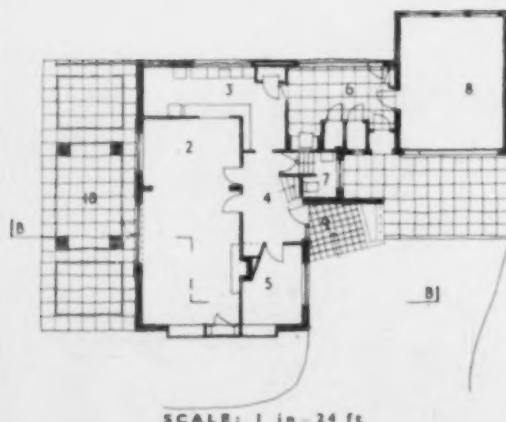
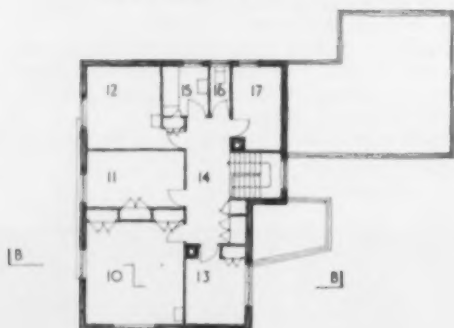




House at
Edgbaston



- KEY**
- 1: LOUNGE. 2: LIVING ROOM.
 - 3: KITCHEN. 4: HALL. 5: STUDY.
 - 6: COVERED YARD. 7: TOILET. 8: GARAGE.
 - 9: BEDROOM 1. 10: BEDROOM 2.
 - 11: BEDROOM 3. 12: BEDROOM 4.
 - 13: BATHROOM. 14: W.C. 15: ROOF SPACE. 16: TERRACE.



SCALE: 1 in = 24 ft

The site is level where the house is situated and then slopes down to the north. During excavations for a deep drain connection portions of a Roman causeway were found and some of the stones from this were built into the terrace paving. Recently completed, the house cost approximately £3 per square foot of living accommodation.

Construction:

11in Cavity walls are formed in 2½in sand-faced mixed buff bricks and local commons for interior leaf. The ground floor is concrete screeded. The first floor is of 9in timber joists with R.S.J.'s to carry upper walls over large spans. Flat roofs are formed of 4in reinforced concrete with asphalt finish, that to the garage being insulated with fibre board on ceiling. The pitched roof



is covered with hand-made clay pantiles, with glass quilt insulation laid on the ceiling joists below. Aerials for radio and television are built into the roof space. All water services are in copper and windows are generally metal in wood surrounds.

Hot water and central heating is provided by a Trianco boiler with thermostatic control, the water being pumped to radiators through narrow gauge pipes. The lounge fire has a controllable air duct below and deep ash pan requiring weekly emptying only. The large southern windows and dining-room window are glazed with "Insulite"; the projecting surrounds are stone-faced concrete. The central panel is of ribbed teak behind which is a glazed cupboard with concealed lights, for the display of china.

Finishes:

A mix of 1 cement, 1 hydrated lime and 6 local yellow sand, was used for the flush rough-textured mortar joint to buff brickwork. Soffits to eaves are asbestos-wood board painted pale blue. Walls internally are plastered, ground floor ceilings plastered on expanded metal, and bedroom ceilings are plaster board. Doors and frames are painted. Living-room and dining-room floors are deal wood blocks which have been close carpeted. Entrance



hall floor is oak blocks and the floors of kitchen and lavatory are thermoplastic tiles. Oak strip flooring is laid on the first floor landing and the staircase is also of oak. Window cills to main downstairs windows are teak, elsewhere tiles or deal painted. All doors have oak thresholds.

The living-room fireplace has teak surround, Swedish green marble face and Belgian granite hearth.

General Contractors: George Stubbings Ltd.

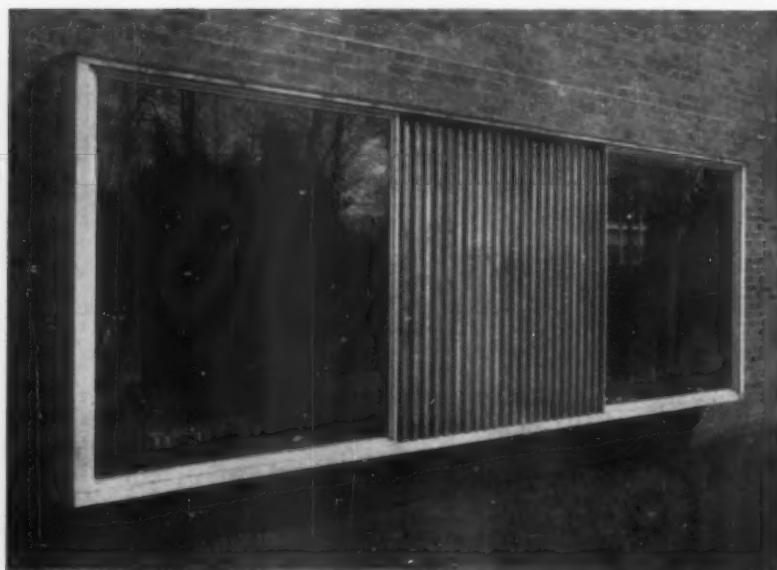
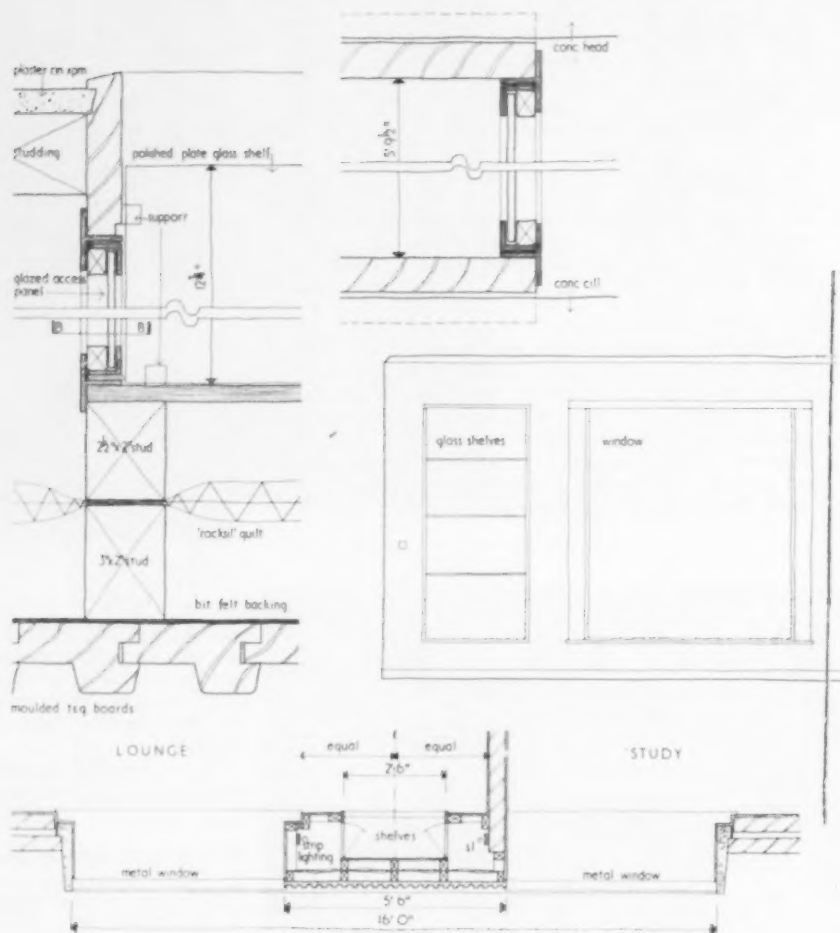
Heating: Hopes Heating & Engineering Ltd. Windows: Henry Hope & Sons Ltd. Ironmongery: Parker, Winder & Achurch Ltd. Bricks: Blockleys Ltd. Reinforced Concrete Raft: Twistell Reinforcement Ltd. Sanitary Fittings: Rowe Bros. & Co. Ltd. Floors: Patent Oak Flooring Company. Thermoplastic Tiles: The Marley Tile Co. Ltd. Kitchen Fittings: Peerless Built-in Furniture Ltd. Fireplace: W. H. Fraley & Sons Ltd. Electric Services: Etna Lighting & Heating Co. Ltd. Tiles: Colthurst, Symons & Co. Ltd. Hand-rail, etc: Craftmetals Ltd. and Mountford Brothers Ltd. Paint: Dulux-I.C.I. Ltd. Emulsion Paint: Smith & Walton Ltd. Paving, etc.: John Ellis & Sons Ltd. Lighting Fittings: G. E. C. Ltd. and Heals Ltd.



House at Edgbaston

Architects:
A. G. SHEPPARD FIDLER
and LEONARD MULTON,
F.F.R.I.B.A. in association

WINDOW DETAILS
SCALE: 1 in = 4 ft



SCALE: 1/31



House at Halesowen

Architects:

CHERRINGTON & STAINTON

executive architect:

K. VICTOR NORRISH, A. R. I. B. A.

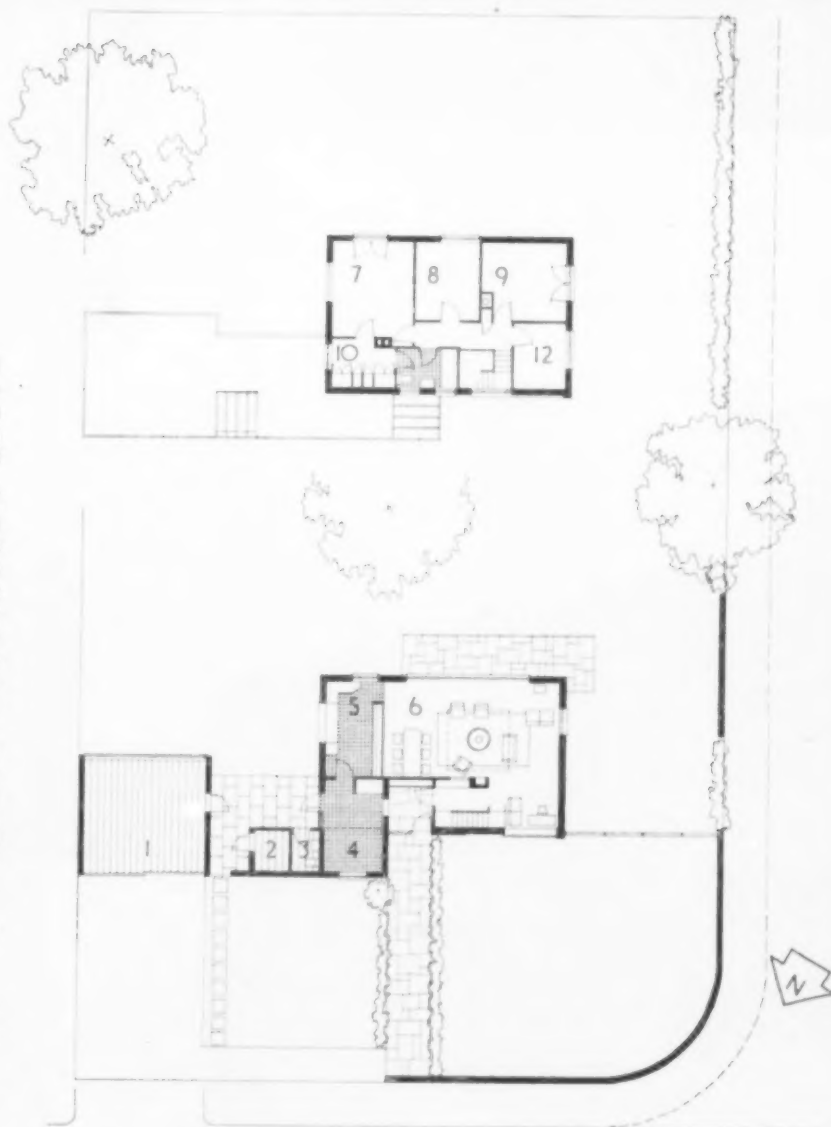
THIS house was designed and built during the licensing restrictions, and after some consideration and pricing it was felt that to plan within a simple rectangle would result in greater economy.

The clients had the problem of entertaining fairly lavishly within the restricted area laid down by the Building Licence, and the architects wished to create not only a spacious effect, but to provide a constantly interesting interior by the juxtaposition of planes with long vistas through the living area, and through the windows to certain dominant features outside.

To free the wall planes and so gain the full "sculpturesque" effect together with the problem of seating a great number of people round the fire decided that the fireplace should be free standing, and this important focal point serves to correlate the different vistas.

The sitting area in the living space

1: Garage. 2: Fuel Store. 3: Lavatory. 4: Recreation Room. 5: Kitchen. 6: Living Room. 7: Bedroom 1. 8: Bedroom 2. 9: Bedroom 3. 10: Dressing Room. 11: Bath Room. 12: Bedroom 4.





House at Halesowen

was further suggested by lowering the ceiling over the area, and apart from a light above the dining table, all main lighting to the area is obtained by indirect lighting above this hovering plane.

The kitchen was not entirely separated from the living area, and the sliding doors of the kitchen fitment pull back to allow the housewife to take some part in the activities in the living area. The kitchen wall beyond serves as a colour plane to limit the vista in this direction.

The dining table was designed by the architects to seat 8 as fixed, with

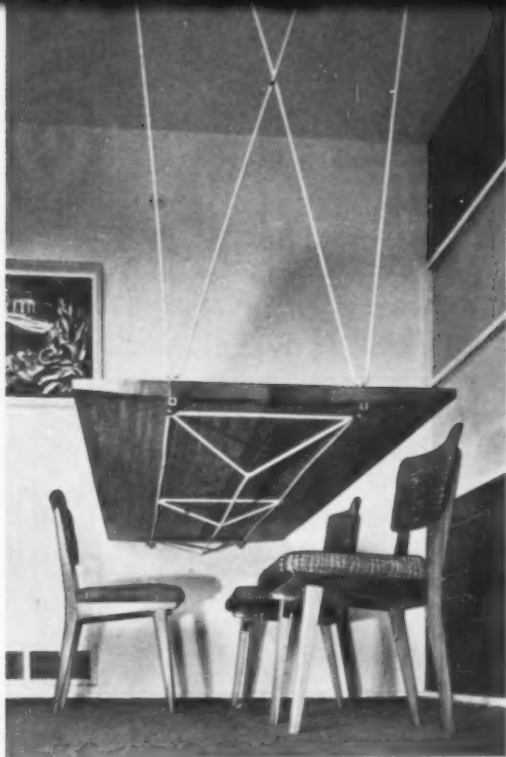
an extension unit (normally used elsewhere in the house) which will seat another five. So that the legs of the main section would not hinder the seating arrangements, the table was suspended at this end from the ceiling and bolted through the top to a simple space frame under the table which serves to support the mahogany top along its length.

The arrangement of windows is such that sunlight enters the living area from early morning until sunset, with the garden beyond freely landscaped to increase the sense of spaciousness.

Brilliant colours were used on various planes to provide limits to the different vistas and to subtly take the eye around from view to view.

The house was built to satisfy the Egerton standard of insulation, com-





Suspended dining table



plete with double glazing, and the background heating is provided by a Radiation Warm Air unit which feeds warm air, thermostatically controlled throughout the house. Great attention has been paid to eliminate all

cold cross draughts, and the system has proved a great success, with evenness of warmth throughout the large ground floor space.

The front of the house provides an interesting play of colour by large

Pyrok sprayed planes against sober red brickwork.

The house was built by direct labour organised by the client and under the constant supervision of the architects.



*Living Room.
A detail of the
fireplace is
shown overleaf.*



an extension unit (normally used elsewhere in the house) which will seat another five. So that the legs of the main section would not hinder the seating arrangements, the table was suspended at this end from the ceiling and bolted through the top to a simple space frame under the table which serves to support the mahogany top along its length.

The arrangement of windows is such that sunlight enters the living area from early morning until sunset, with the garden beyond freely landscaped to increase the sense of spaciousness.

Brilliant colours were used on various planes to provide limits to the different vistas and to subtly take the eye around from view to view.

The house was built to satisfy the Egerton standard of insulation, com-

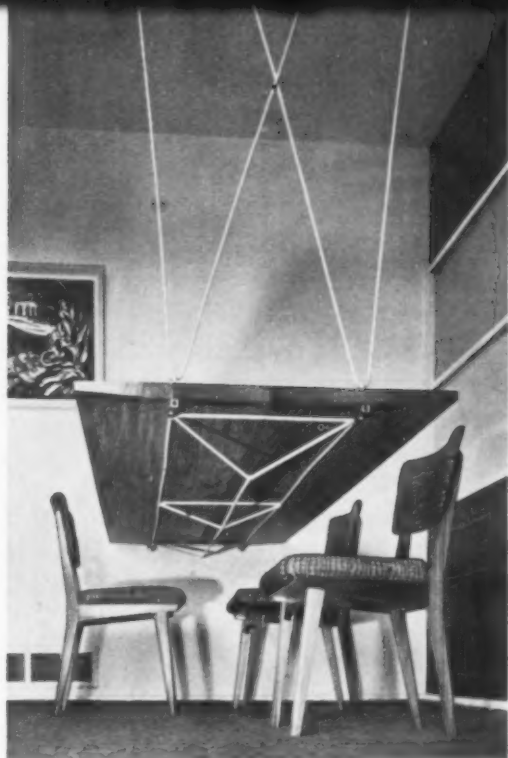
House at Halesowen

was further suggested by lowering the ceiling over the area, and apart from a light above the dining table, all main lighting to the area is obtained by indirect lighting above this hovering plane.

The kitchen was not entirely separated from the living area, and the sliding doors of the kitchen fitment pull back to allow the housewife to take some part in the activities in the living area. The kitchen wall beyond serves as a colour plane to limit the vista in this direction.

The dining table was designed by the architects to seat 8 as fixed, with





Suspended dining table



plete with double glazing, and the background heating is provided by a Radiation Warm Air unit which feeds warm air, thermostatically controlled throughout the house. Great attention has been paid to eliminate all

cold cross draughts, and the system has proved a great success, with evenness of warmth throughout the large ground floor space.

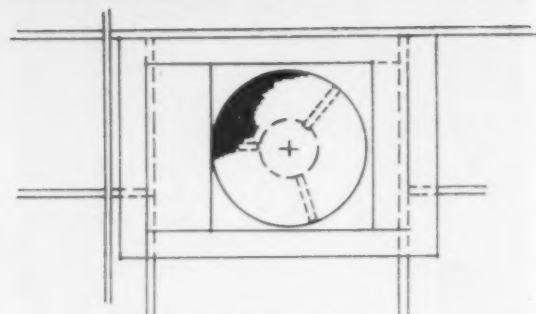
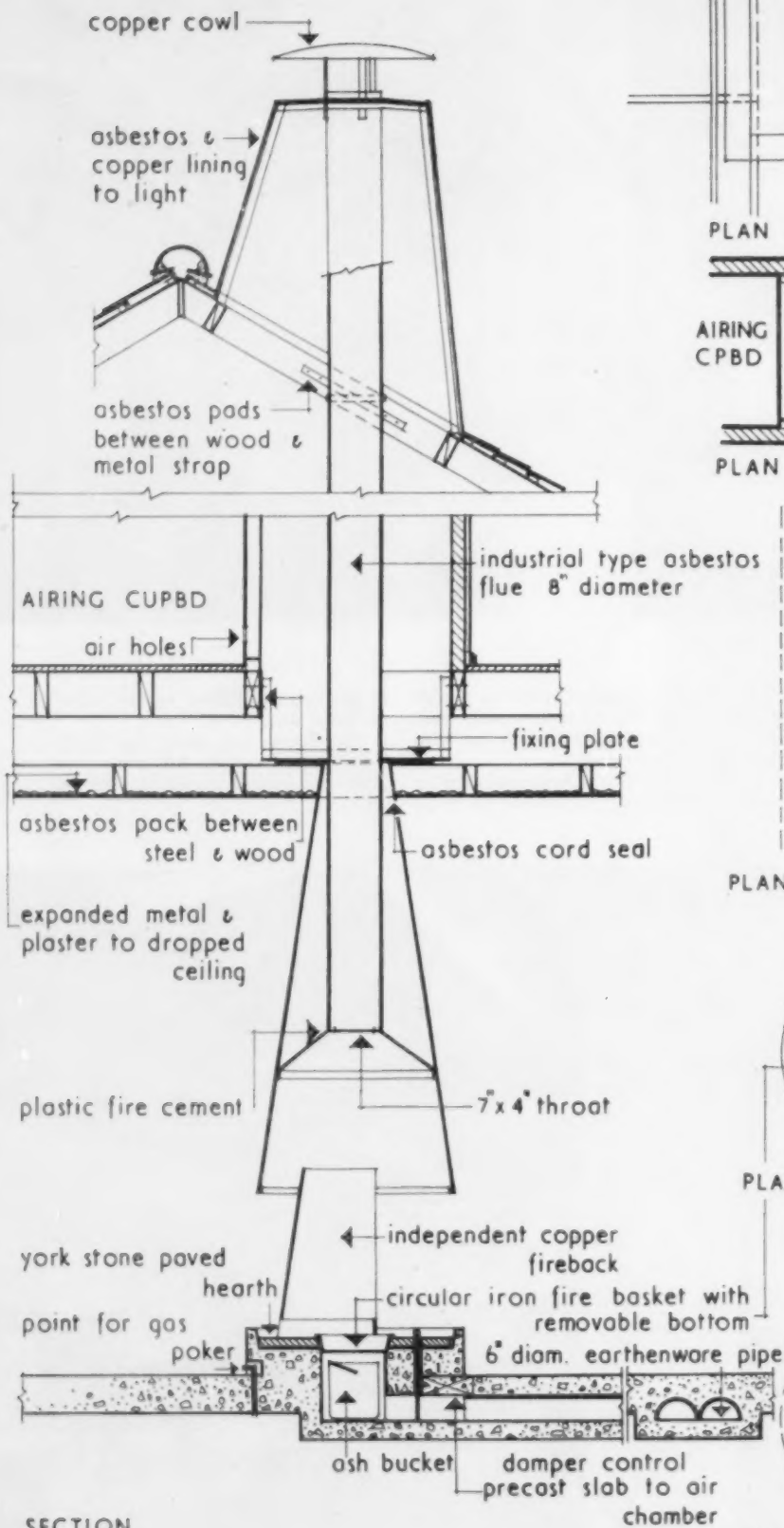
The front of the house provides an interesting play of colour by large

Pyrok sprayed planes against sober red brickwork.

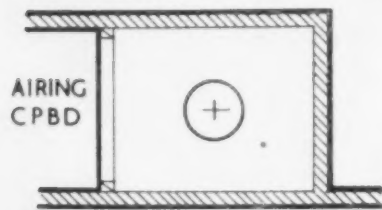
The house was built by direct labour organised by the client and under the constant supervision of the architects.



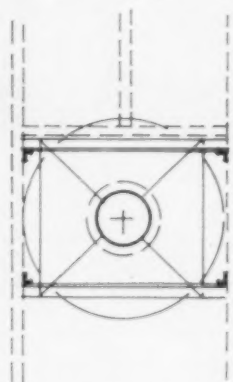
*Living Room.
A detail of the
fireplace is
shown overleaf.*



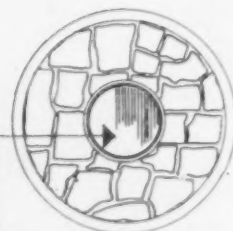
PLAN ABOVE ROOF



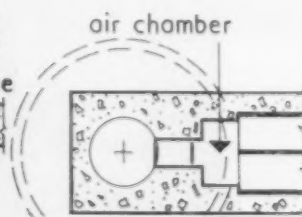
PLAN THRO FIRST FLOOR



PLAN OF CANOPY



PLAN OF HEARTH



PLAN BELOW HEARTH

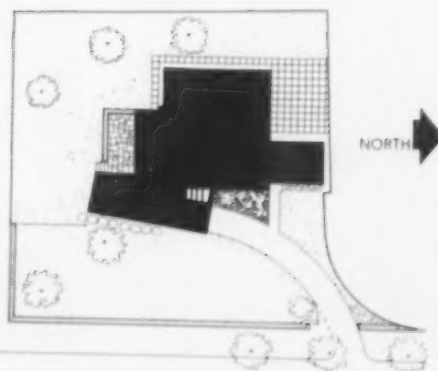


House at Ryecroft Road, Streatham

Architects: ELLIS E. SOMAKE, F. R. I. B. A. in association with GEOFFREY H. UFFINDELL, A. R. I. B. A.

THE problem was to provide bungalow living accommodation for a family of three with additional accommodation on first floor for the occasional guest.

The site, which is adjacent to Streatham Common, slopes to the west away from the road and has a frontage of about 140ft to Ryecroft Road, the building line being set 30ft back. The planning has been so arranged as to obtain the maximum privacy to the bedroom and bathroom portions as well as to the terrace on the south side of the living room, the only





FIRST FLOOR



GROUND FLOOR

SCALE: 1 in = 24 ft

KEY

1. Living Room. 2. Bedroom. 3. Kitchen.
4. Garage. 5. Bathroom. 6. W.C.
7. Boiler Room. 8. Fuel. 9. Store.
10. Tools.

House at Streatham

ground floor windows facing front being the dining recess and the kitchen. This layout also lent itself to obtaining correct orientation for the various rooms.

The structure is load bearing 11in cavity brickwork externally with 4½in brick partitions internally where there are load bearing and with concrete block partitions elsewhere. Standard metal window units in wooden frames are used generally. Both flat and pitched roofs are finished in copper sheeting on wood boarding with fibre glass insulation. With the exception of a panel of colour washed common brickwork on the front elevation the walls externally are all of facing bricks. A feature has been made of the living room chimney stack which is finished externally in Random Field stone.

The floor finishes are lino tiles generally with fitted carpet on screed to the living rooms, bedrooms and internal lobby, the entrance hall being in terrazzo cast *in situ*. Ceilings are generally of "V" jointed soft board panels except over the dining area where perforated hardboard ceiling has been introduced at a lower level in order to provide a more intimate proportion. The kitchen ceiling is finished in acoustic tiles.

The entrance hall is lit by a panel of glass bricks adjoining the entrance and both the inner bedroom, lobby and boiler room by means of cast glass dome lights.

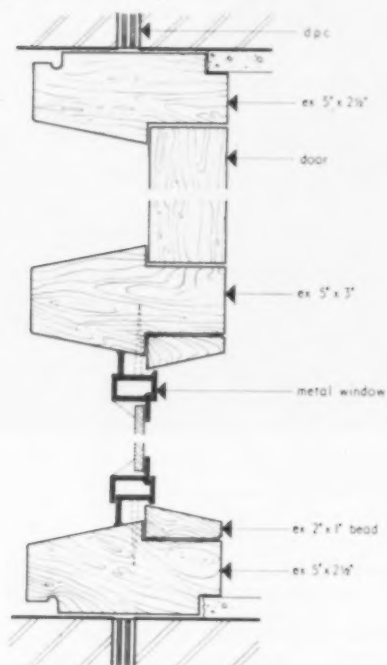
Central heating throughout is by means of a low pressure thermostatically controlled hot-water system with a solid fuel fired boiler. The boiler room has been planned adjoining the kitchen and virtually in the centre of the ground floor area. A water softening installation has been included.

The General Contractors were Messrs. Douglas Bros. Ltd., of Wilcox Road, S.W.8.



Living Room

Below, typical door-window plan. Scale: $\frac{1}{4}$ F.S.



Entrance Front

South front showing loggia protected by wall of the garage

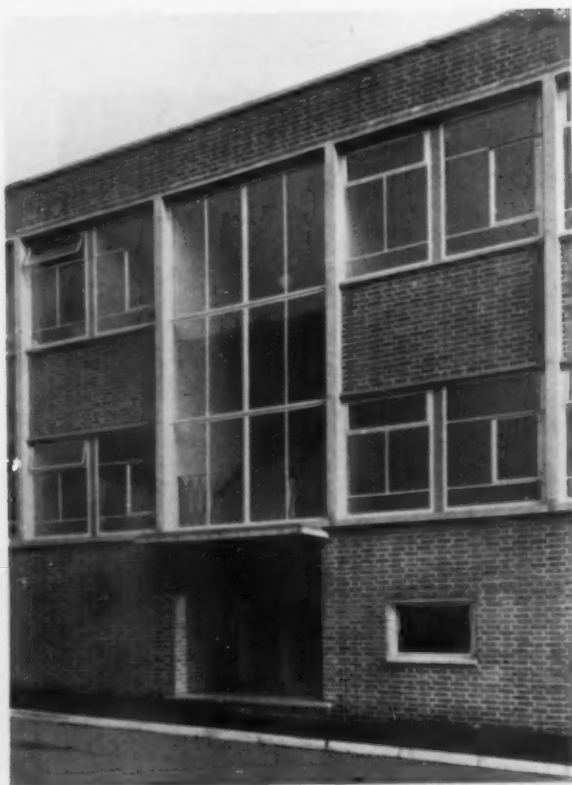


**Medical
Block and
Drawing Office
for Stewarts
& Lloyds Ltd.**



ARCHITECTS: PHILIP SKELCHER & PARTNERS

Entrance to Drawing Office



MESSRS. Stewarts & Lloyds Ltd. have a large works at Halesowen, Coombs Wood Tube Works. Additional accommodation was considered to be necessary for Drawing Office, Maintenance Engineer and Medical Treatment. It was decided to combine this accommodation in one building.

The site, composed of outcrop rock, had a considerable cross-fall, so that the building, a two-storey one with small basement, can be approached on one side via a bridge direct to first floor level, and on the other side up a flight of steps giving access to the ground floor. The Medical Centre entrance is on the end of the building, with easy access from the road for vehicles, including ambulance when the necessity arises.

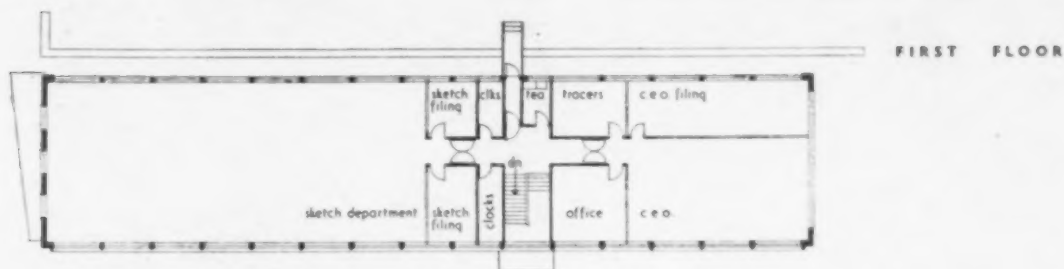
The first floor of the building comprises two large Drawing Offices, three small offices, Cloakrooms, Tracers and Filing Rooms, and a small Kitchen for tea-making.

The ground floor is separated into two parts by a cross wall. On one side, approached from the Drawing Office entrance staircase, is a suite comprising Maintenance Engineers' Offices, Drawing Printing Department, and Toilets. On the other side of the wall is the Medical Centre.

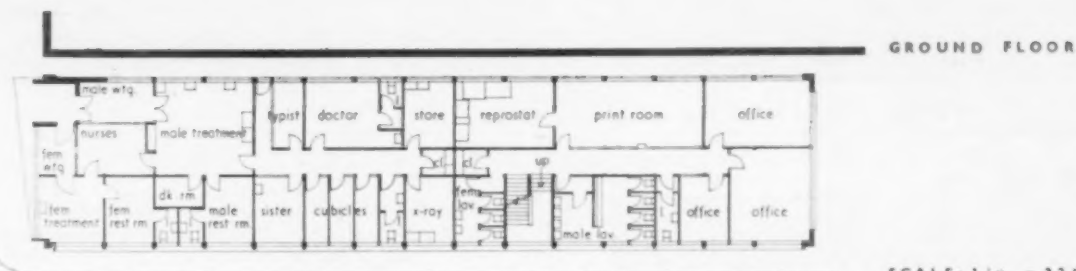
The Medical Centre provides accommodation for the regular medical treatment and welfare of the workers at Coombs Wood Tube Works, the primary examination and recording of all new employees, the treatment of minor accidents which happen regularly, remedial treatment and facilities to deal with emergencies. It is the Headquarters of a doctor who spends the major part of his time at Coombs Wood Tube Works but also visits other factories belonging to the Company in the neighbourhood.

The Medical Centre accommodation can be divided into two parts, the Main Treatment Rooms and Rest Rooms—a unit of interconnecting rooms with no passages—and immediately adjacent the Doctor's Suite with special treatment cubicles and a separate entrance. This separate entrance allows persons to come for consultations, interviews and special treatment without interfering with the work in the other part of the Suite.

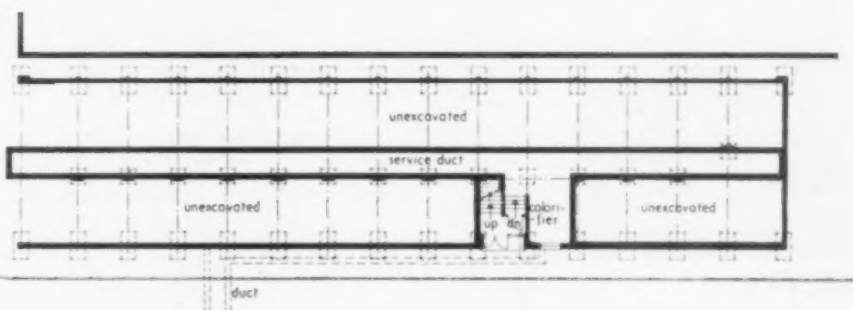
The Main Treatment Room is designated for males, as



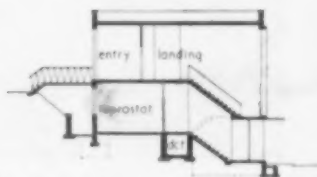
FIRST FLOOR



SCALE: 1 in. = 32 ft.



BASEMENT & FOUNDATION PLAN



there is a greater number of men working at the Mills than there are women, though in case of an emergency or serious accident the Main Treatment Room would be used irrespective of the sex involved. Stretchers are stored in the Male Waiting Room, and the Male Treatment Room has all the facilities of a modern hospital casualty theatre, with Dark Room immediately adjacent, X-Ray Room very close.

Separately entered, is a small suite designed for female patients. It has Waiting Room, Treatment Room, Rest Room and Toilet.

The lay-out has been designed to be operated by a very small staff, comprising Doctor and Secretary/Typist, Sister and Assistant Nurse, and Cleaner.

Most of the windows have Insulight double glazing for soundproofing and thermal insulation. The floor finishes are marked on the $\frac{1}{4}$ scale plan. The wall finishes are as follows:— For Treatment Rooms and Rest Rooms—tiling. For X-Ray Room—Barium plaster. For the remainder—normal plaster.



Print room with acid resisting floor



Large drawing office



Main treatment room

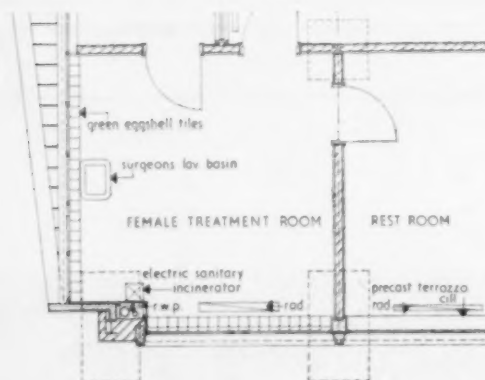
DETAIL. Scale: 1 in. = 8 ft. ➤



General view showing bridge from bank to drawing office.

Below the ground floor is a calorifier chamber, and a large service duct, so that all services, pipes, cables, drainage, water, electricity and telephones, are kept below floor level. The building is heated from a main boilerhouse some distance away in another part of the Works.

The whole of the interior decoration is a carefully considered colour scheme, but with walls of a number of varying pastel shades. Externally, the building is of Himley facing bricks, with stone dressings, with very small areas of bright colours introduced in the painting of windows, doors, etc.



General contractor: W. J. Whittall & Son, Ltd.

Bricks: Himley Facings, Himley Brick Co. Ltd. Stone Dressings: Empire Stone Co. Ltd. Bridge Balustrade: Stewarts & Lloyds Ltd. Windows: Henry Hope & Sons Ltd. Ironmongery: Messrs. James Gibbons Ltd. Staircase Balustrade: Messrs. James Gibbons Ltd. Electrical Work: Midlands Electricity Board, Halesowen. Heating: Messrs. Froggatt & Prior Ltd. Floors: Siegwart Beams, Siegwart Floor Co. Ltd. Floors, Terrazzo: Venetian Flooring Co. Ltd. Floors, Plastic: Marley Tile Co. Ltd. Wood Flooring: Bennetts Wood Flooring (Tungit) Co. Ltd. Special Glazing: Pearce & Cutler Ltd. Painting: Messrs. Mander Bros. Ltd. Medical Centre Fittings: A. J. Gupwell (Shopfitters) Ltd. Embossed Glass: Midland Sandblast Co. Asphalt: R. I. W. Protective Products Co. Ltd. Sanitary Goods: Griffin Foundry Ltd. Steelwork: Rubery, Owen & Co. Ltd. Doors: Leaderflush Ltd. Plumbing: J. C. Toogood Ltd.

LIBRARY NOTES

Ten Books on Architecture

Leone Battista Alberti. Ed. Joseph Rykwert, Tiranti, 35s.

A FUNDAMENTAL difference between the Gothic and the classic architectural traditions is that whereas a mediaeval abbey or cathedral in Northern Europe is readily susceptible, without aesthetic detriment, to many additions and changes, a classical building, whether ancient or of the pure Renaissance, cannot suffer change or deviation without damage to the artistic and intellectual notions of its designers. Thus the Parthenon must have been unsatisfying in the days when it had a Byzantine apse at one end of its cella and a Turkish minaret projecting from its roof. Salisbury Cathedral, the most "classically" conceived and tautly designed of our English great churches, was on the other hand enhanced by the later addition of its tower and spire.

The Renaissance, being a time when intellectualism and Platonist philosophy were systematically applied to architecture, was naturally a period which saw, for the first time since the Roman Vitruvius, a sequence of architectural treatises where in the canons of classical architecture, so far as these could be comprehended by an age which knew hardly anything of the Greek buildings built before Vitruvius, were laid down with a rigidity second only to the dogmatism of Pugin and the Camden Gothicists of the nineteenth century. Of these the great foundation work, as much Platonist as Vitruvian and long anticipating the contributions of Palladio to the literature of building, was the "Ten Books" by Alberti. Written in Latin, about 1452, and first printed in 1485, the treatise was rendered into Italian and then in the eighteenth century was translated and edited for English readers by Burlington's protégé Giacomo Leoni. A third edition, of 1755, was printed in English alone; it is this edition, with illustrations in the eighteenth century manner and not in all respects faithful to Alberti's textual instructions, which is now reproduced. It is in a facsimile whose text, though generally handsome and recapturing the atmosphere of two centuries ago, is at times distressingly blurred and muddy. With it is printed a biographical notice (from the editions of 1726 and 1739) by Raphael du Fresnoy, and some useful editorial matter by Mr. Joseph Rykwert.

The main value of this venture is the mere fact that Alberti's text is now made available, in convenient and reasonably cheap form, to a wide range of English students. One can do little more here than comment on some of the basic assumptions and attitudes of mind inherent in Alberti's great

opus, and suggest how far he may still be thought relevant to those who are "about building."

As a prime example of the humanist, or *uomo completo*, of the Renaissance Alberti had an approach to architecture which ran wide and deep. Clearly, however, he knew nothing of Byzantine and would have been horrified had he ever seen good Gothic. He sees architecture as a Platonic blend of philosophic thought, mathematics, form, and music. His humanist notions, as Dr. Wittkower has shown in his "Architectural Principles of the Age of Humanism" led him to a rigidly idealistic (in the Platonic sense) adherence to the centrally planned, and preferably domed church. One therefore saw in Italy a great proliferation of such buildings whose liturgical and congregational suitability, as the leaders of the Counter Reformation saw when they built the Gesù and elongated St. Peter's, was not always equal to the intellectual pleasure one gets in viewing them. None the less, from Bramante through Alessi to Wren the centrally planned church had a strong attraction for architects. But in this respect, as in his generally rigid advocacy of the "Ancients," and of what he conceived to be the immutable rules of the classical age, Alberti ran as much risk of artistic ossification as the Greek Orthodox Church or our modern archdruids of the Georgian canon. His work, with its long-drawn exemplars from mythological or more historic ancient sources, is often prolix and must always in parts have seemed irrelevant. Yet much of it is highly practical, and sets out principles on such matters as the leading off of stormwater, costing, "planning" difficulties, and non-ferrous clamps, which are still fresh and worth the mental digestion of any young architect. The last chapter of Book IX, entitled "To what sort of persons the Architect ought to offer his Service" should certainly be read word for word. Of the not infrequent touches of deliberate humour I can recommend the chapter, palpably added along with all of Book X as an afterthought, on methods, mythical, legendary, or drawn from any witches' Mrs. Beeton, for the extermination of "serpents, gnats, bugs, flies, mice, fleas, moths, and the like troublesome vermin."

BRYAN LITTLE.

Analysis of Symmetric Cylindrical Shells

By John McNamee, Ph.D. Published by H.M. Stationery Office, Price 12s. 6d.

JOHN MCNAMEE is at the Building Research Station and has already been responsible for a great deal of work on shell roofs. In 1952 at the Symposium on Concrete Shell Construction he presented a paper giving a résumé of all the existing methods of design of shell roofs, and quite

obviously from both of these he is very well informed indeed on the subject.

The amount of literature that has been published in English on shell roofs is extremely small, and apart from a recent book by Gibson & Cooper and sundry papers presented to various institutions, the material is extremely scanty.

Analysis of Symmetric Cylindrical Shells will provide for anyone whose knowledge on structures is good a basis on which to learn the theory. It is presented in the form of a series of lectures which were given at Liverpool University, and as such take the first principles of the subject in an elementary way to a standard at which the reader can develop his own theories. It should be emphasised that this is not a book for the "amateur" as a fairly high standard of mathematics is required and some knowledge of the theory of elasticity.

As the name suggest, the book deals entirely with symmetric shells. In other words it does not touch on north light shells and other similar roofs. An outline is given of the various methods that have been used up to the present and comparisons of them are made. The use of matrices is gone into very fully and there is an extremely useful section to the book which deals with this method of solving the necessary equations.

It should be emphasized that this is essentially a book for Engineers and it is unlikely that it will be of much use to the average Architect as it deals solely with the theory and does not touch in any way upon the construction or architectural aspects of shell roof design.

R. A. SEFTON JENKINS.

Architects and Architecture in Dundee, 1770-1914

By David M. Walker, D.A. (Dundee) for Abertay Historical Society, 2s. 6d.

A MOST interesting piece of original research into a comparatively unexplored field. In this publication Mr. Walker has preserved a record of the fast disappearing monuments of Victorian wealth in Dundee. In addition to the buildings he has concerned himself with the men who have designed both the public and private buildings in the city during the period of its greatest prosperity and expansion. The text is illustrated with 13 black and white drawings, showing representative buildings, many now no longer existing.

It is to be hoped that this publication might be the means of encouraging others of a similar nature for other industrial cities and towns. Books of this nature could do much to emphasize the need in every town, industrial or otherwise, for the employment of architects on all projects.

M. E. T.

Information Digest

OFFICIAL PUBLICATIONS

- **Forest Products Research, 1954.** Published by H.M.S.O., York House, Kingsway, London. Price 3s. 6d. net.

This Report gives details of the work carried out during the year at the Forest Products Research Laboratory. There has been no significant change in the scope and nature of the work during the year, but the board emphasises the need for an increase in the amount of fundamental investigation being done at the laboratory when effort can be spared from the very exacting demands of routine testing and the advisory activities which are undertaken in every section. Work on the grading and testing for strength of structural sizes of home grown soft woods have continued during the year; a great deal of work seems to have been done also on the mechanical strengths of timber and plywood, in particular a series of tests on timber joints made with round wire nails has been completed which were carried out on three member joints in which the total thickness of members is equal to the length of the nails used and two member joints in which the total thickness is equal to, or greater than, the length of the nails used. Further tests are being made to assess the relationship between density and strength and stiffness of the timber in nailed joints. The standard testing of plywood for the determination of strength properties has continued throughout the year and the properties of five common species of timber have been determined; this work is of great importance if there is to be the increase in the structural uses of plywood which there seems little doubt that some Engineers and Architects would like to take place. An investigation of the blunting of wood cutting tools has included the study of the change in shape and condition of cutting edges of various materials brought about by the properties of timber and by other factors. There is a great difference in the behaviour of cutting edges and tests have shown the importance of using the correct sharpness angle, particularly with hard tipped tools. Study continues of the house longhorn beetle as being a possible serious menace to softwood structural timbers. In Continental countries it is well established and does considerable damage and since the discovery of infestation by this beetle in Surrey a few years ago the laboratory has been studying its life history. Interesting experimental work has been carried out in the making of satisfactory hardboards from four commercial timber species from Malaya, some of them qualified as super hardboard in regard to their strength and water resistance without receiving any special treatment other than the heat treatment that is now common practice in the industry. Satisfactory hardboards have also been made from African pencil cedar, of which large quantities have hitherto proved unsuitable for normal commercial use; it was found that the cedarwood oil which itself has a commercial value could be extracted from the wood before processing without reducing the high resistance of the product to fungal attack.

- **Ancient Monuments Boards for England, Scotland & Wales. First Annual Reports, 1954.** Published by H.M.S.O., York House, Kingsway, London. Price 6d. net.

The three Boards were constituted on April 1, 1954. In the report for England it is stated that 435 monuments were reported for scheduling under Section 12 of the Ancient Monuments Act, 1913. It states that the total number of monuments now scheduled in England is 5,235. The report expresses the alarm of the Board at the increase in the number of monuments which have been damaged in recent years by the extension of arable farming and afforestation. The advice of the Board has been sought on three rather unusual proposals to carry out works of restoration of ancient monuments, the most interesting and important concerns Stonehenge, the second

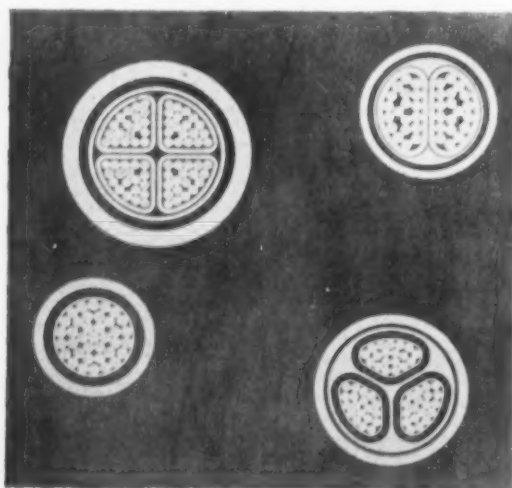
is the reinstatement of Chestnuts Long Barrow, Addington, Kent, and the third the Tower of London. Both the English and Scottish Boards have met three times during the year, but the Welsh Board only once. The total number of monuments scheduled in Wales is now 1,686.

- **Building Research Station Digest No. 77, Linoleum.** Issued for the Building Research Station, Garston, Watford, by H.M.S.O. Price 3d.

This Digest gives a fairly complete summary of the information concerning linoleum. It is particularly useful in its remarks on the sub-floors needed to provide a satisfactory background on which this flooring material should be laid. Some very helpful information on adhesives for linoleum is included. Information on care and maintenance of linoleum is also given, but unfortunately it does not state how best to remove easily marks such as those from black boot polish and rubber soles.

- **Building Research Station Digest No. 78, Vibrations in Buildings.** Issued for the Building Research Station, Garston, Watford, by H.M.S.O. Price 3d.

This Digest is a very useful introduction to a very complicated subject, it contains some quite helpful information on the isolation and reductions of vibration.



One-third size reproduction of a new wall-paper designed by A. S. Brewer for Messrs. W. T. Henley's Telegraph Works Co. Ltd. Shown for the first time at the Electrical Exhibition at Brighton, it is printed on Sanderson Wallpaper by Kennedy Displays using the Silk Screen Method.

REPORTS OF SOCIETIES

- **National Trust Properties, Spring, 1955.** Published by The National Trust, 42, Queen Anne's Gate, London, S.W.1. Price unstated.

This annual publication which is always well presented and contains a number of very interesting illustrations of some of the properties. The Report lists separately the acquisitions since April 1953, the Hotels, Inns and Hostels owned by the Trust and Centres for Field Studies. The main part of the publication is devoted to information about each of the properties owned by the Trust and which is presented County by County.



PILKINGTON'S **"ARMOURPLATE" Glass Doors**
make the most inviting entrances

These are the doors for the business that wants to be in the public eye. Fitted into a fashionable shop front or a dignified office lobby, they help to bring a message out on to the pavement . . . arresting the eye, guiding the step. "ARMOURPLATE" Glass Doors are supplied in two sizes and with a choice of contemporary fittings. For full details write to:—

P I L K I N G T O N B R O T H E R S L I M I T E D

CONSULT THE TECHNICAL SALES AND SERVICE DEPARTMENT, ST. HELENS, LANC. (TELEPHONE: ST. HELENS 460), OR SELWYN HOUSE, CLEVELAND ROW, ST. JAMES'S, LONDON, S.W.1. (TELEPHONE: WHITEHALL 9673-6). SUPPLIES ARE AVAILABLE THROUGH THE USUAL TRADE CHANNELS.
ADAIS

"ARMOURPLATE" IS A REGISTERED TRADE MARK OF PILKINGTON BROTHERS LIMITED.





Non-Vibrating PARTITIONING



**N.S.E. MANUFACTURE
A COMPLETE RANGE
OF OFFICE AND
INDUSTRIAL
EQUIPMENT.**

An illustration of our Standard Partitioning with top filling, finished in a selected stoved enamel and installed at Montreal, Canada. N.S.E. Standard Internal partitions are adaptable to practically every requirement.

Norwood Steel Equipment

(LONDON) LTD.

Sales Offices and Showrooms:

149 Borough High Street, London, S.E.1.

(Near London Bridge Station) Telephone: HOP 5033 (P.B.X.)

Works:— **West Norwood and Harlow, Essex.**

Northern Office: 1 Chancery Lane, Spring Gardens, Manchester 2 (Deansgate 4263)
Western Office: 3/5 Sussex Place, Ashley Road, Bristol 2 (Bristol 57408)

Information Digest (continued)

- **World Power Conference. Annual Report, 1954.** Prepared by the Central Office of the World Power Conference, 201, Grand Buildings, Trafalgar Square, London, W.C.2.

At the Annual General Meeting of the British National Committee of the World Power Conference, Sir John Hacking was re-elected Vice-Chairman, Sir Vincent de Ferranti, M.C. continues as the Chairman. Included with the Report is a list of the arrangements which have been made by the British National Committee for the preparation of papers for Fifth World Power Conference to be held in Vienna in 1956, which includes some 26 papers to be given by British Authorities as part of the work of some 11 sections. The Annual Report announces that, after some unavoidable delay, the transactions of the Sectional Meeting held in New Delhi in 1951 have been published. A report of the Brazilian Sectional Meeting held in 1954 is also published; at the meeting 522 members from 34 countries and 94 papers were presented by 21 National Committees. As already stated the Fifth World Conference is to be held in 1956 and in addition Sectional Meetings are planned to be held in Yugoslavia in 1957, in Canada in 1958, and in Switzerland in 1960.

- **The Professional Classes Aid Council. Annual Report, 1954-55.** Copies available from the Council at 20, Camden Hill Square, London, W.8.

This Council, which exists for relief of distress among the professional classes and their dependents, does extremely valuable work. Among its members are representatives of the Architectural Association and the Royal Institute of British Architects.



This new factory for Allan H. Williams (Chester) Ltd. specialise in Aluminium Doors, Windows and Screens, is doubled glazed throughout.

- **Bulletin of special courses in higher technology, 1955-56.** Published by the London and Home Counties Regional Advisory Council for Higher Technological Education. Copies obtainable from the Regional Advisory Council, Tavistock House South, Tavistock Square, London, W.C.1. Price 1s. 6d.

It is interesting to note that architecture and building in no way enter into the sphere of the higher technological education covered by this list although the pamphlet sets out an immense range covering an extraordinary wide range of subjects.

- **The Cement Industry in Europe.** Published by the Organisation, European Economic Co-operation. Available at H.M.S.O., York House, Kingsway, London. Price 7s. (Post free 7s. 3d.).

The main feature of developments in the cement industry is a more than average expansion throughout the industry in all O.E.E.C. countries. In the last few years there has been a steady rise in the production and consumption of cement which is in keeping with the trend in the last 30 years. Nevertheless the annual rate of increased production, which was very rapid up to 1953, slowed down in 1954. There is still a number of large scale projects for increasing capacity and some fear that in the more or less distant future pro-

duction may outrun demand. It is interesting to note that the O.E.E.C. Cement Working Party recommends the expansion of building programmes and the continued development of the growing tendency to seek new uses for cement. The document is a very complete survey of the subject.



The new headquarters for Beecham Foods Ltd., architects: Eric Firmin and Partners, was built in 13½ months. The site is on the Great West Road at Bedford. The General Contractors were Messrs. Kyle Stewart Ltd.

- **High Flats. A Report of a Symposium.** Published by the Royal Institute of British Architects, 66, Portland Place, London, W.1. Price 6s., by Post 6s. 6d.

A full and thoroughly illustrated report of the proceedings at this symposium has now been published. It claims to be the only comprehensive publication covering the subject as it applies to this country. Most of the papers published in the report were by architects who had personal experience of designing this form of housing though there were also contributions by two Engineers, a builder, a scientist, a fire expert and a sociologist. In publishing the report the R.I.B.A. as a body does not express any opinion for or against the policy of building tall flats at high density of populations; they suggest that this is a matter for the individual housing authority to decide but it is clear that many such authorities are considering building tall flats and consequently the architectural profession must study how to design them with seamliness, comfort and economy and also members of Housing Authorities should understand the social and economic problems involved.



New extensions to the research laboratories of Murex Welding Processes Ltd., at Waltham Cross have recently been completed. The department covers an area of about 29,000 sq feet. Architects: Scherrer & Hicks.

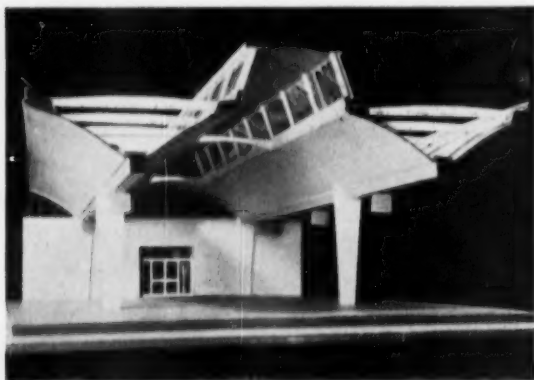
Information Digest (continued)

- **Modernisation of Industrial Buildings.** Published by the Industrial Welfare Society, Robert Hyde House, 48, Bryanston Square, London, W.1. Price 2s. 6d.

This booklet, which has been prepared by Mr. C. S. White, F.R.I.B.A., has attempted to bring together a body of ideas and experience on improving processes and buildings in industry. The booklet deals with process planning from the point of view of increasing efficiency of the whole plant and makes the point that the business of modernisation of plant layout, the removal of outdated equipment, reconciling of conflicting space requirements and the provision of better accommodation for administration, laboratories, canteens and welfare are all parts of the modern problem. Although very brief, being only 12 pages, the report contains some most useful information.

- **What Automation means.** Published by the British Productivity Council, 21, Tothill Street, London, S.W.1. Price 6d.

The publication is in fact the reproduction of a paper by Mr. Frank G. Wollard, M.B.E., who has very special experience of automation extending over a period of some 30 years. The paper discusses the impact of the new system of manufacture on management, engineers, supervisors, and the men on the shop floor. This great change in methods of production is such that they are undoubtedly likely to have influence on the planning of industrial buildings and therefore a knowledge of the subject seems to be quite essential to architects likely to design industrial buildings.



This illustration shows a cut-away model of the construction used in the New Murphy factory being built at Welwyn Garden City. Architect: C. W. Hutton, B.Arch., F.R.I.B.A.

- **Safety and Health in Industry.** Published by Skye Press Limited, Portiere's House, Portiere's Road, London, W.2. Copies available from The Director, Industrial Health and Safety Centre, 97, Horseferry Road, London, S.W.1. Free of charge.

The publication serves the dual purposes of a buyer's guide on industrial safety equipment and a handbook on general safety and health for all those engaged in industry. The booklet is written in simple non-technical language and addressed to both the worker and the executive; it shows many types of factory accidents which can befall the worker in industry, both the careful and the careless. It is fully illustrated. The advertisers represent a large number of those in the industrial safety equipment manufacturing field. A foreword by Sir George Barnett, H.M. Chief Inspector of Factories, refers to the main causes of accidents. Safety officers and all concerned with industry are likely to find this publication of great interest.

- **Architecture as a Career. Prospectus of the School of Architecture at Kingston-upon-Hull.** Issued by the Regional College of Art and Crafts, Kingston-upon-Hull. Free.

This is a very attractively presented publication explaining the work of the Architect and giving information about the Architectural courses at the Kingston-upon-Hull College of Art.



A view of part of the Expanded Metal Company's exhibition at the Exchange Engineering Centre, Birmingham. The show cases were designed by Reginald Treleaven and the general contractors were J. & W. Waller, Ltd.

- **Outline programme of His Royal Highness the Duke of Edinburgh's Study Conference on the Human Problems of Industrial Communities within the Commonwealth and Empire.** Copies of the programme are available from the Administrative Headquarters, 48, Bryanston Square, London, W.1.

This conference is to be held from the 9th to the 27th of July, 1956. Conference membership is open to men and women of the Commonwealth and Empire broadly within the age group 17 to 45 years who are engaged in the managerial, technical and operative roles in industry. They are intended to be persons who hold, or in the foreseeable future will hold, positions of responsibility and who have a proven interest in the life of their community.



The Artichoke in Sidney Street, Whitechapel, a new pub for Mann, Crossman and Paulin was opened recently. Specially designed patterns in Formica laminated plastic inlaid in an individual character to the interior. Architects: Stewart & Hendry.



Are you interested in money?

Why, do you wish to give me some?

In a manner of speaking - yes. By using Perlited Carlite you can have all the advantages of a pre-mixed plaster at a cost which is an economic proposition for any type of contract with other special advantages.

Now you're talking. What advantages in particular?

Perlited Carlite weighs only a third as much as ordinary plasters.

That's worth knowing. Is Perlited Carlite a good plaster in other ways?

The best. It's particularly easy to use, strong and resistant to cracking with a high thermal insulation value. And the standard never varies.

CARLITE *perlited*
pre-mixed plaster



For full details of Carlite please write to: The Gotham Company Ltd, Gotham, Nottingham
The Carlisle Plaster & Cement Co, Cocklakes, Carlisle

ZINC WEATHERINGS



House at Kensington. Architects: Leonard Manasseh & Partners.

In this house, contemporary design fits snugly into a Kensington background. It also illustrates some interesting uses of zinc—to cover the neat porch hood, and as weatherings for window sills and roof verge. For weatherings, zinc is easy to fix and rigid, and prevents staining of wall surfaces.

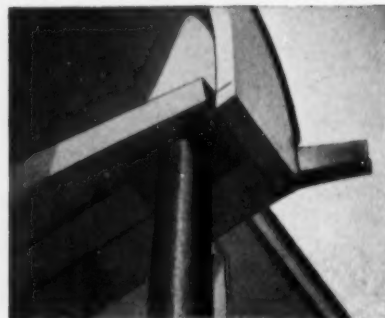
From roof to foundation, zinc has vitally important uses in contemporary building—for gutters, pipes, weatherings, flashings and hoods. And there are now no restrictions on its use. Supplies are plentiful, and likely to remain so. The price of zinc has dropped considerably, and it is now one of the cheapest permanent materials.

The Zinc Development Association is a non-trading body which is always prepared to give technical help to potential users. Publications, together with lists of stockists of all zinc building materials and of firms specialising in zinc work, are freely available.

ZINC DEVELOPMENT ASSOCIATION · 34 BERKELEY SQUARE, LONDON, W.1 · TELEPHONE GROSVENOR 6636



Porch with zinc covered hood.



Detail of porch hood, showing gutter.



Zinc weathering on window sill.



Weathering to curved sill of bay window.

**THINK
ZINC** 

Information Digest (continued)

TRADE PUBLICATIONS

- **Chance for a lifetime.** Published by John Laing & Sons Ltd., 4, Regent Street, London, S.W.1. Free.

This extremely well-produced publication draws attention to the opportunities offered by John Laing & Son Ltd. to those who desire to join the Building and Civil Engineering Industries. The publication is worth the consideration of parents of and those who contemplate entering the Contracting sides of these industries. The company have a five-year pupil scheme for public and grammar school leavers. The company asks no premium and in fact pays salaries during the total five-year period. Opportunities are offered in Quantity Surveying, Cost Surveying, Architecture and Accountancy. There are also limited vacancies for boys wishing to qualify in Civil Engineering and also in Mechanical Engineering.

- **Mod-X.** Published by Mod-X Structures Limited, 20, Loundes Street, London, S.W.1.

This is a well presented publication endeavouring to set before, presumably the public, the advantages of this company's special method of construction. Presumably it is not offered to the Architects or the Builders since the system offers a complete design service and architects' services to plan buildings and prepare detail schemes; the company is also prepared to quote for the supply and erection of buildings in the U.K. or abroad. The company make clear that they do not supply standard buildings but only standard parts. However, it is curious to note that the booklet gives no indication what these standard parts are like or what their dimensions are in reality.

- **Improved Thermal Insulation with Reduced Fire Hazard.** Issued by the Gypsum Building Products Association. Free.

This a nicely presented little publication full of helpful information. The tables giving classifications of materials in relation to B.S.476 Fire Tests are helpful and also the details of the application of gypsum plaster board as an aid to fire resistance. A Table is also given for thermal transmission values for typical constructions incorporating gypsum plaster board.



Illustration shows one example of the new contemporary range by Claygate Fireplaces Ltd. The timber surround can be had in light oak, mahogany and light or dark walnut.

- **Concerning the manufacture and use of Resweld and Elco ply-woods and other products.** Issued by L. Keizer & Co. Ltd., 66, St. Annes Street, Liverpool, 3. Free.

A 24-page booklet, well presented and well illustrated, describing the manufacture of plywood and giving a good deal of information as to the origin of the timber, the types of adhesion and the normally available sizes.

- **Expamet Expanded Aluminium.** Issued by the Expanded Metal Company, Limited, Burwood House, Caxton Street, London, S.W.1. Free.

The booklet gives information on the types and finishes available for expanded aluminium. The material is available in 12 standard colours and in a considerable range of meshes. The booklet gives illustrations of a wide range of applications of this material which are very interesting.



The roof of Leyton Public Baths was recently re-glazed using aluminium glazing bars. The work was carried out by Aluminium Construction Ltd., of Woking, in conjunction with the Development Division of Northern Aluminium Co. Ltd.

- **The Forming of Aluminium Sheet.** Issued by the Northern Aluminium Company Ltd., Banbury, Oxfordshire. Free.

A 64-page booklet presenting in a readily understood and essentially practical form the fundamental concepts of the usage of the material. The subjects dealt with in its pages include the characteristics of the metal and its manipulation in bending, spinning, deep-drawing, pressing, drop hammer forming, dye pressing, stretchforming, handforming, blanking, piercing and a number of supplementary operations. All the processes are illustrated by examples from actual practice and are described in detail.

- **The Cause and Cure of Damp and Decay in Masonry.** Issued by Szerelmey Ltd., 273, Rotherhithe New Road, London, S.E.16. Free.

This publication commemorates the centenary of the company which is well known in the fields covered by the booklet. A great deal of very useful information is provided, but unfortunately in a rather unattractive form.

- **Rigidal.** Published by The British Aluminium Company Ltd., Norfolk House, St. James's Square, London, S.W.1. Free.

Four brochures have been published giving detailed information relating to corrugated aluminium sheet of the industrial trough 3in pitch type, mansard type and the industrial trough type T. These brochures of the type which Architects like to keep as they give only the useful information.

- **Permalume Aluminium Core Bitumen Damp course.** Issued by Permanite Ltd., 455, Old Ford Road, London, E.3. Free.

This publication gives information on the use of aluminium incorporated in a hesian base bituminous damped proof course.

- **Redland Tiles.** Issued by Redland Tiles Ltd., Moorhouse, near Westerham, Kent.

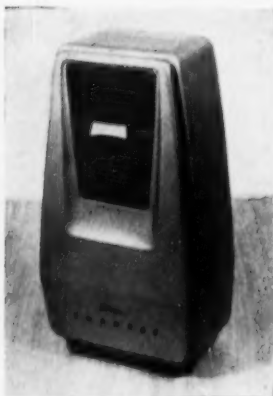
This brochure gives more technical information than in previous publications by this firm relating to their concrete roof tiles. The publication is nicely presented and contains information very helpful to the user.

MOSAICS



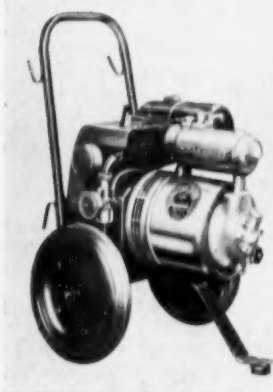
**PLANT,
HAND AND BENCH TOOLS**
E3/44

A new twin electric grinder, the "Gryphon" by Brook Motors Limited, Express Works, Muddersfield. Telephone 6400/7, can be bench or pedestal mounted as illustrated. Available with single or 3 phase motors, 6" or 7" wheels, grinding speed is approx. 3,000 r.p.m.



**SERVICES
SPACE HEATING**
B3/73

The new Empress heater with a Paraffin consumption of 1 gallon to 45.50 hours. Made by Messrs. Flora Stove and Hardware Co. Ltd., 56 Waldegrave Road, Teddington, Middx. Telephone No. Molesey 2122. It is finished in bluish grey with maroon grille and plinth. Performance: the heat output is between 3,000 and 5,000 B.T.U.'s/hr.



**PLANT
COMPRESSOR**
E15/4

The Hymatic Hydrovane 7P100 rotary compressor, made by The Hymatic Engineering Co. Ltd., of Redditch, Worcs., is powered by a 2 h.p. four-stroke petrol engine and displacing 7 c.f.m. at 100 p.s.i. The motor pump delivers smoothly and normal air receiver is unnecessary, only sufficient air is pumped to meet the consumption at any given moment and the load on the engine is reduced when air is not being used. The rubber-tyred wheels are 14" in diameter and the complete weight is 165 pounds.



**SERVICES
WATER HEATING**
B6/33

The Ideal O-DE domestic boiler by Ideal Boilers and Radiators Ltd., Ideal House, Gt. Marlborough Street, W.1, Telephone No. Gerrard 8686, has been produced and improved to replace the present O.D.C. boiler. This boiler has a rating of 20,000 B.T.U.'s/hr. and is suitable for use with hot water storage tanks of 25-30 gallon capacity. It is available in grey or cream mottle enamel finish.

INDUSTRIAL NOTES

● Final arrangements are now being made for the next Electrical Engineers Exhibition (sponsored by the Association of Supervising Electrical Engineers), which will again be held at Earls Court. Opening daily from March 20 to 24, 1956, from 10 a.m. to 7 p.m., excepting Wednesday, March 21, when the hour for closing will be 9 p.m.

● A new range of fluid process duplicating machines is being marketed by Grant Productions Limited, manufacturers of photo-copying equipment and of the Grant Projector. The machines are called "Cento Duplicators." Duplicating is carried out with the aid of a glazed art paper Master Sheet, the text being printed in reverse on the underside by Hectographic carbon. The rest of the operation resembles ordinary "stencil" duplicating although, in fact, the principle is quite different.

● After many years of research and practical tests, Jenolite Limited have developed a new method of removing mill scale from structural steel, and are now introducing the new processes in this country.

● Reinforced concrete work is now being carried out at Ray Hall by the British Reinforced Concrete Engineering Co. Ltd., and includes the main pumping station and generating house, two primary settling tanks of 105ft diameter, two circular humus tanks of 90ft diameter, two sludge consolidation tanks, a sludge elutriation tank, gas holder tank, sludge digestion tank of 65ft diameter x 50ft deep and the re-circulation pump house.

● Edinburgh's multi-storey flats at Blackhall are making progress, the first section of 14 houses nearing completion and will be ready for occupation within four to six weeks. The complete block will contain 42 three apartment flats served by self-operating lifts and with a wide range of similar amenities. These are the first multi-storey flats sponsored by Edinburgh and are regarded as the prototype of future construction in the central area, where multi-storey construction was a tradition dating from the fifteenth/sixteenth century.

● Mactaggart and Mickel Ltd. launched special promotional publicity for "building for purchase" in August with a show house at Carmunnock Road, Cathcart, as the main feature. This display house has been redecorated and re-furnished and used to publicise home buying.

● "Quite simple laboratory tests have shown that rubberised bitumen is a less brittle material than a normal bitumen which has the same consistency or viscosity. This suggests that rubberised bitumen has a higher tensile strength than normal bitumen." This is one of the statements made by Dr. A. R. Lee, Deputy Director of the Road Research Laboratory, in a Paper entitled "The Design of Bituminous Road Compositions" just published, as Technical Note No. 2, by The British Rubber Development Board. Copies are available, free of charge, from The British Rubber Development Board, Market Buildings, Mark Lane, London, E.C.3.



BOLTON Patent totally enclosed box-type top tracks.

Twin Hoffmann or Skefko ball bearing pulleys running on special bright steel runner rails.

For additional strength, shutter leaves are folded round $\frac{1}{8}$ dia. wire; hinging strips are perfectly machined to ensure free movement.

16's gauge mild steel shutter leaves rust-proofed by the sherardising process.

Flat back design (Patent No. 464984) fixed to steel pickets on which the door is built by means of T-headed bolts and rivets.

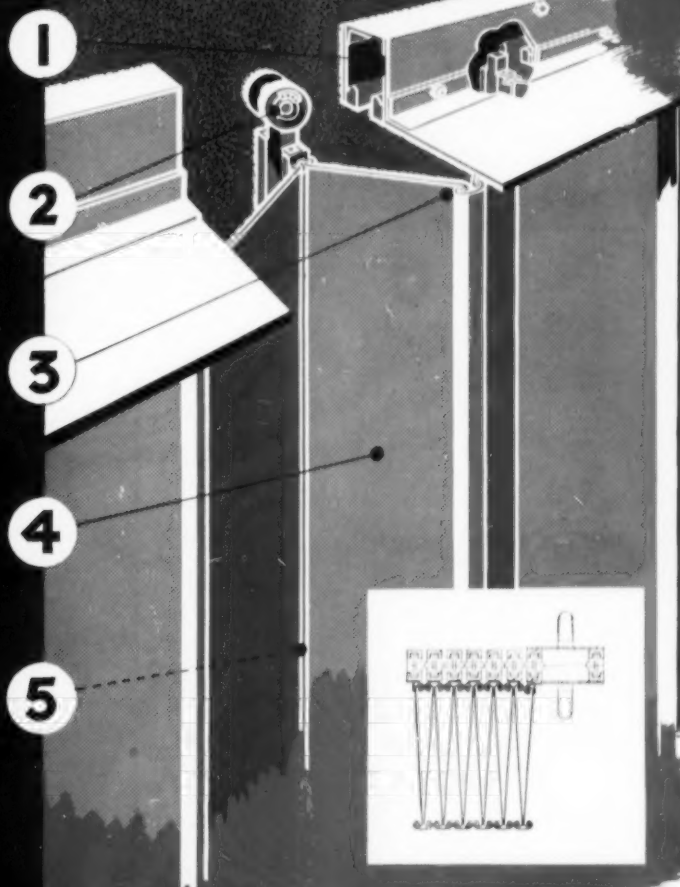
5

of the reasons why more

(Inset) Sectional plan-door in bunched position. Full details are contained in our fully illustrated 104-page Catalogue A.B. '55. May we send you a copy?

Sole Patentees & Manufacturers:—

BOLTON GATE COMPANY LIMITED • BOLTON • LANCASHIRE



BOLTON C-O-L-L-A-P-S-I-B-L-E
DOORS & GATES

are sold every year



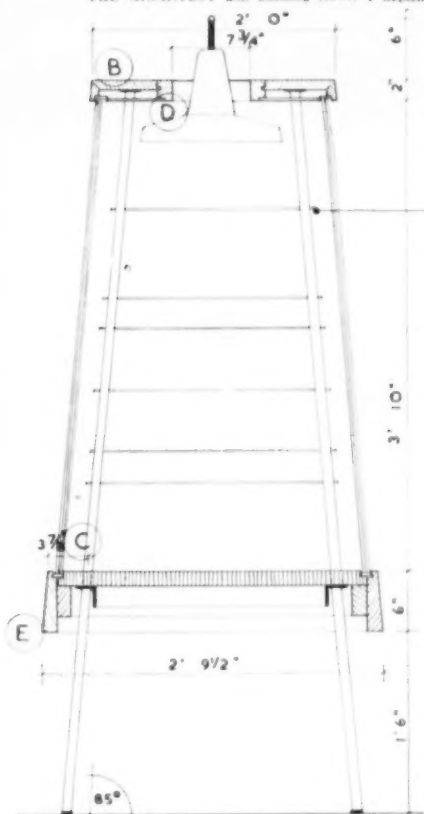
NATIONAL ART GALLERY

RE-ROOFING AT NATIONAL GALLERY

Photographs by kind permission of Ministry of Works



PERMANITE LIMITED • LONDON • BIRMINGHAM • SALFORD

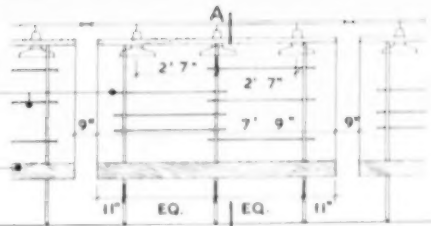


SECTION A-A • 3/8" TO 1' 0"

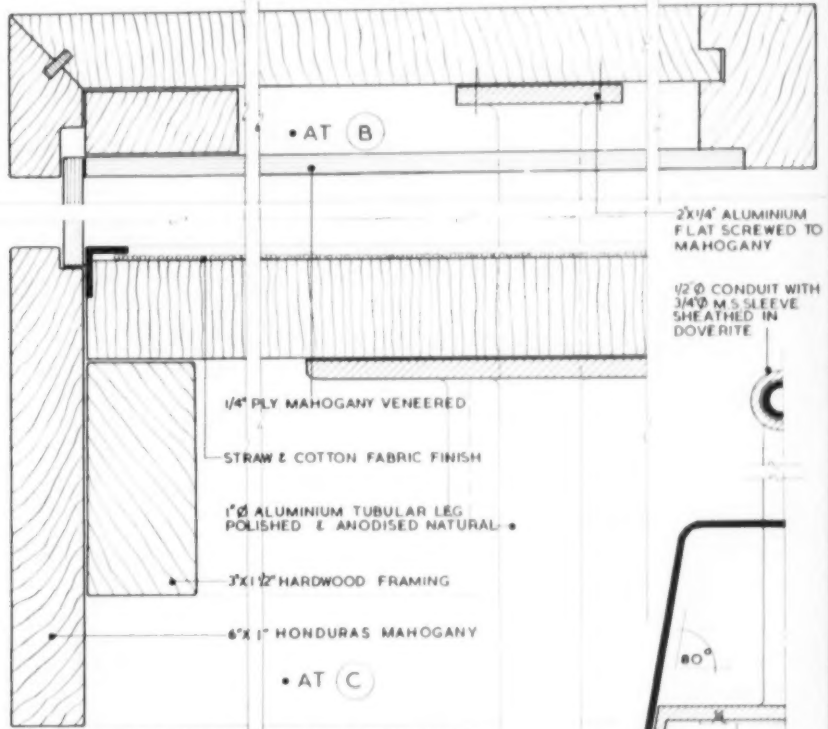
1/4" ADJUSTABLE PLATE
GLASS SHELVES

HONDURAS MAHOGANY

1/4" Ø M.S. ROD, STOVE
ENAMELLED BLACK



KEY ELEVATION • 3/16" TO 1' 0"



1" MAHOGANY STAINED DARK

EX 2"x1" HARDWOOD FRAMING

1/4" POLISHED PLATE
GLASS SLIDING DOORS

FIBRE
RUNNER

• 1/2 FS. DETAILS THROUGH END OF SHOWCASE

M.S. SUPPORTING
RING

3-1/2" Ø RODS
WELDED TO SUPPORTING
RING SPADE ENDS
SCREWED TO
FRAME

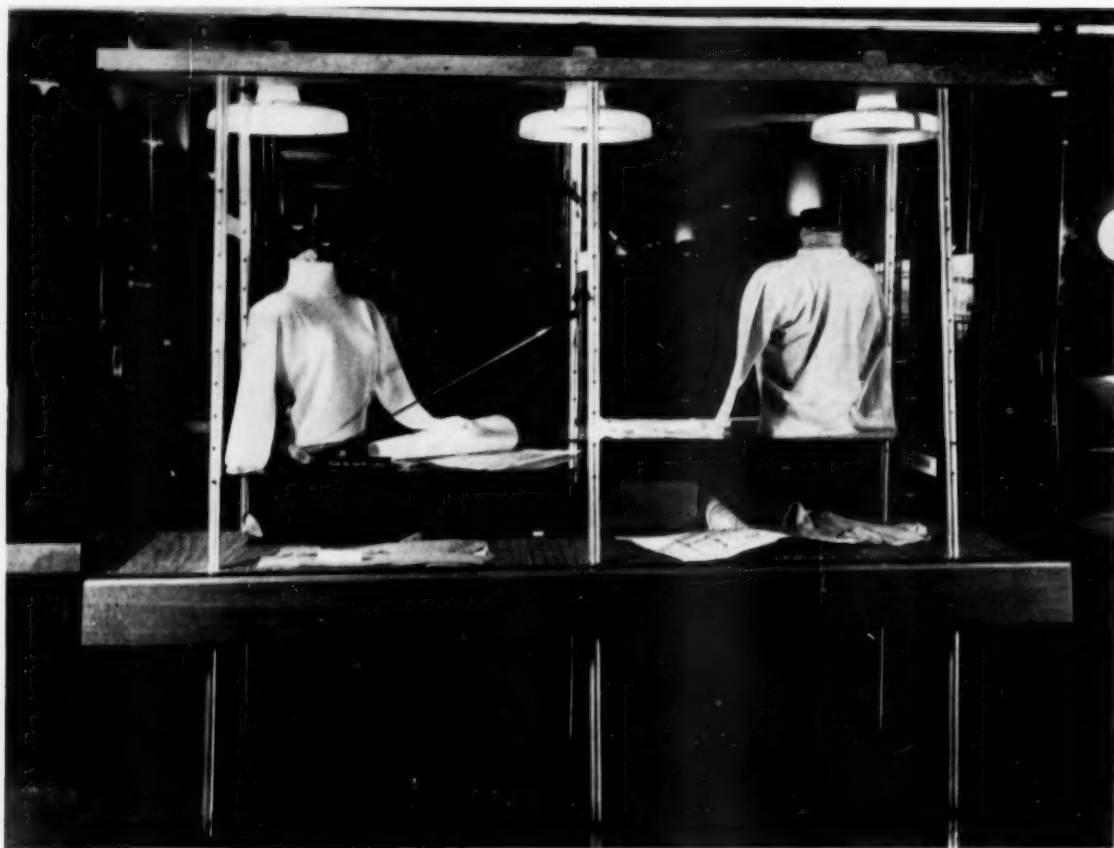
THREADED LUG BRAZED TO OUTER PART
OF REFLECTOR, AS DETAIL 'F'

SPUN ALUMINIUM REFLECTOR

2"x2x1/4" ANGLE FRAMING SCREWED TO 1"
BLOCKBOARD

5/8"x1/2" ANGLE STOVE ENAMELLED BLACK &
SCREWED TO BLOCKBOARD

SECTION • 1/2 FS.



SHOWCASES: WAITING ROOM, LONDON AIRPORT
ARCHITECT: FREDERICK GIBBERD

GLOSSARY AND SYMBOLS

GLOSSARY OF TERMS

Definitions of electrical terms in general usage that may concern the architect are given below, and on G.S. 2, with brief explanations. The symbols are taken from British Standard 108: 1951, Section 19: Location Symbols for Electrical Installations. They refer particularly to the purpose of the outlets and not specially to electrical apparatus.

Alternating Current: The direction of flow of the electric current is reversed many times a second. The national standard frequency in this country is 50 cycles per second. A cycle contains two reversals, viz., from one direction to the opposite, and then back to the original direction.

Alternator: See 'Electric Generator'.

Ampere (often contracted to *Amp.*): The unit of electric current. As an indication of the order of magnitude of this unit, a 2-kW electric radiator on a 240 volt circuit takes a current of 8.3 amperes. Minute currents, such as occur in certain radio circuits, are measured in milliamps., 1,000 of which equal one amp.

British Thermal Unit (B.Th.U.): The quantity of heat required to raise the temperature of 1 lb. of pure water one degree Fahrenheit. One Unit of Electricity contains the same amount of energy as 3,412 British Thermal Units.

Busbars: The main conductors connecting the various sections of panels of a switchboard.

Capacitor (formerly termed 'condenser'): An arrangement of conductors in the form of metal sheets or foil separated by a thin dielectric of paper or other insulating material. It provides what is known as electrical capacity and A.C. will flow through it. Capacitors are widely used in radio apparatus, also for radio interference suppression and power factor correction purposes.

Central Electricity Authority (C.E.A.): The Electricity Supply Act of 1947, which brought the electric supply industry under national ownership, established a Central Authority to generate and transmit electricity to 14 Area Electricity Boards which in turn act as retailers and distributors of electricity to consumers.

By the Electricity Re-organisation (Scotland) Act 1954, the South West and South East Scotland Boards have since been transferred, together with the power stations in their areas, to the South of Scotland Electricity Board.

Circuit Breaker: An earth-leakage circuit breaker which will cut off the main supply as soon as an earth fault reaches a predetermined level is a sensible precaution in districts where dry conditions or other reasons make a low resistance earth connection difficult or unreliable.

Conductor: A substance that allows an electric current to pass relatively freely, i.e., has a high conductivity. Copper is a good conductor.

Current: The movement or 'flow' of electricity; usually measured in amperes.

Cut-out: A fuse such as the main fuse provided by the Electricity Board on a consumer's premises.

Dielectric: Insulation between two electrically charged bodies.

Direct Current (D.C.) — or Continuous Current: Current that flows continuously in the same direction.

Discharge Lamp: A lamp in which the current, passing through a mixture of gas and metallic vapour, forms a luminous electric discharge giving from 2½ to 5 times the light of a filament lamp of equivalent consumption. The light may be greenish (mercury) or yellow (sodium).

Distribution Main: The low voltage street main used for the general supply to consumers. These are usually fed from a high voltage feeder or ring main through a transformer in a substation and are either buried underground or carried overhead on poles.

Double Pole (D.P.): A switch that opens and closes both the wires or 'poles' of a circuit.

Diversity Factor: Any particular electrical appliance is spoken of as having a high or great diversity if among a group of these appliances, very few are in use simultaneously. If, say, 100 appliances, each loaded to 1 kW, produce a maximum demand of 20 kW, the diversity factor would be 1 in 5. It is the great diversity of domestic cooking and heating that enables Electricity Boards to quote low rates for general domestic use.

Earth, Earthing: Connection with the ground, i.e. the general mass of the earth, in such a manner that an immediate and safe discharge of energy is ensured at all times.

Electric Generator: A machine that converts mechanical energy into electrical energy. One that generates direct current is usually called a 'dynamo' while one that generates alternating current is usually called an 'alternator'.

TABLE 1 CONTROL GEAR

Main control	
Main switch	
Change over switch	
Switchboard, distribution board, or fuseboard	
Contactor	
Meter	

TABLE 2 LIGHTING OUTLETS

Ceiling outlet lighting, filament lamp	
Wall outlet lighting, filament lamp	
Ceiling outlet for discharge lamp NOTE: When it is intended to use a tubular or other discharge lamp, reference should be made in the drawing or schedule to the exact location of the outlet in relation to lamp position, and also to the position of the ancillary apparatus	
Ballast unit, where installed remote from lamp fitting	
Power factor capacitor, where installed remote from lamp fitting	
Lighting outlet connected to an emergency system	
Exit box with wiring for normal and emergency systems	
Ceiling outlet for filament lamps with wiring connected to normal and emergency systems	
Ceiling outlet with wiring for filament and discharge lamps	
Ceiling outlet with wiring for discharge lamp connected to normal system, plus wiring for filament lamp connected to emergency system	
Street lighting standard	

TABLE 3 SWITCHES

General symbol for local switch when considered applicable	
1-way switch	
2-way switch	
Intermediate switch	
Pendant switch	
Pull switch	

TABLE 4 SOCKET OUTLETS

Socket outlet		
Switch socket outlet		
A reference may be given against the symbol thus: Current carrying capacity Reference as required		
NOTE: Combinations of the above outlets and switch symbols may be used if required Example: Wall outlet & local switch		

TABLE 5 FIXED HEATING OUTLETS

Tubular heater NOTE: 1. Length to be to scale and also to be given in schedule. 2. The circle represents the position of connection to the fixed wiring. 3. N equals number of tubes in bank	
Fixed radiator or heating panel NOTE: Details of equipment to be given in schedule	
Convection heater	
Electric unit heater	
Immersion heater	
Thermostat	
Immersion heater with incorporated thermostat	
Self contained electric water heater	
Humidistat	

Electrodes: The conductors that convey an electric current into or out of a liquid or a gas.

Electro-Magnetic Induction: If an alternating current, or a direct current of varying strength, is passing through a conductor, then any other approximately parallel conductor in the vicinity will have an electro-motive force induced in it. If the ends of the latter conductor are joined to form a closed circuit, an electric current will be induced. In practice, the respective conductors usually take the form of coils of insulated wire. Electric generators, static transformers and induction motors depend upon electro-magnetic induction for their operation. The principle was discovered by Michael Faraday in the year 1831.

Electro-Motive Force (E.M.F.): A difference in electrical potential that tends to cause an electric current to flow from the point of higher potential to the lower.

Feeder: A main cable supplying a system of distributing mains.

Fluorescent Lamp: A tubular Discharge Lamp internally coated with a powder that fluoresces under the action of the discharge, producing a white or coloured light.

Four Wire Distribution: The usual system of distribution employed on 3-phase A.C. systems; it consists of three 'phase' wires and one neutral wire.

Fuse: A safety device consisting of a few inches of relatively fine wire, mounted in a suitable holder and connected to part of an electrical circuit. If the current exceeds a predetermined value in amperes, the fuse wire melts (i.e. the fuse 'blows') and thus obviates damage to the circuit that it protects. The blown fuse wire should only be replaced by another of suitable capacity.

Grid: The high voltage transmission system constructed and formerly operated by the Central Electricity Board.

High Voltage: Normally exceeds 650 volts.

Horse Power (H.P.): The unit of rate of doing mechanical work. 1 kilowatt is equivalent to 1.34 H.P. when the efficiency of conversion is 100 per cent.

I.E.E. Regulations: The Regulations for the Electrical Equipment of Buildings, issued by the Institution of Electrical Engineers, which, though not mandatory, are the standard by which all electrical installations are judged and the basis of every trustworthy specification. They state the main requirements and precautions for ensuring satisfactory results, including safety from fire and shock, forming a recognised code to which everyone engaged in electrical work is expected to adhere.

Installation: 'Consumer's wiring installation' means the consumer's wiring, together with any apparatus upon the premises connected or intended to be connected thereto.

Insulation: A non-conducting material such as rubber, plastic, china, glass, mica, air, etc., enclosing, surrounding or supporting a conductor.

Interlocking Switch Plug: A plug and socket so arranged that the plug cannot be inserted or withdrawn unless the switch is in the 'off' position.

Kilowatt (kW): 1,000 watts: A unit of electrical power. In the case of a D.C. supply or a single phase A.C. supply at unity power factor, the number of kilowatts is obtained by multiplying the pressure in volts by the current in amperes and dividing by 1,000, e.g. an electric fire taking 5 amperes at 200 volts will consume power at the rate of

$$\frac{5 \times 200}{1,000} = 1 \text{ kW}$$

In the case of single phase A.C. other than at unity power factor, the product of volts and amperes must be multiplied by the power factor. In the case of 3-phase A.C. the product of volts and amperes must also be multiplied by the square root of 3 (i.e. 1.73). Thus a 3-phase motor taking a current of 5 amperes at 400 volts at a power factor of 0.75 is consuming power at the rate of

$$\frac{400 \times 5 \times 1.73 \times 0.75}{1,000} = 2.6 \text{ kW}$$

Kilowatt-hour (kWh): The amount of electricity consumed, as measured by kilowatts, multiplied by hours. A kilowatt-hour is commonly called a unit of electricity.

Kilovolt-ampere (kVA): Applies to A.C. only. It is the product of the pressure in volts and the current in amperes divided by 1,000, and when multiplied by the power factor gives the power in kilowatts. Is sometimes called the 'apparent' power and is used to describe the rating of a transformer or other A.C. equipment. To give an example, a 10-kVA, 200-volt single phase transformer would be fully loaded if used to supply a motor taking 50 amperes but if the power factor of the motor is only 0.6, the true power is only 6 kW and the consumption as registered by the meter if the motor is run for one hour, will be 6 units.

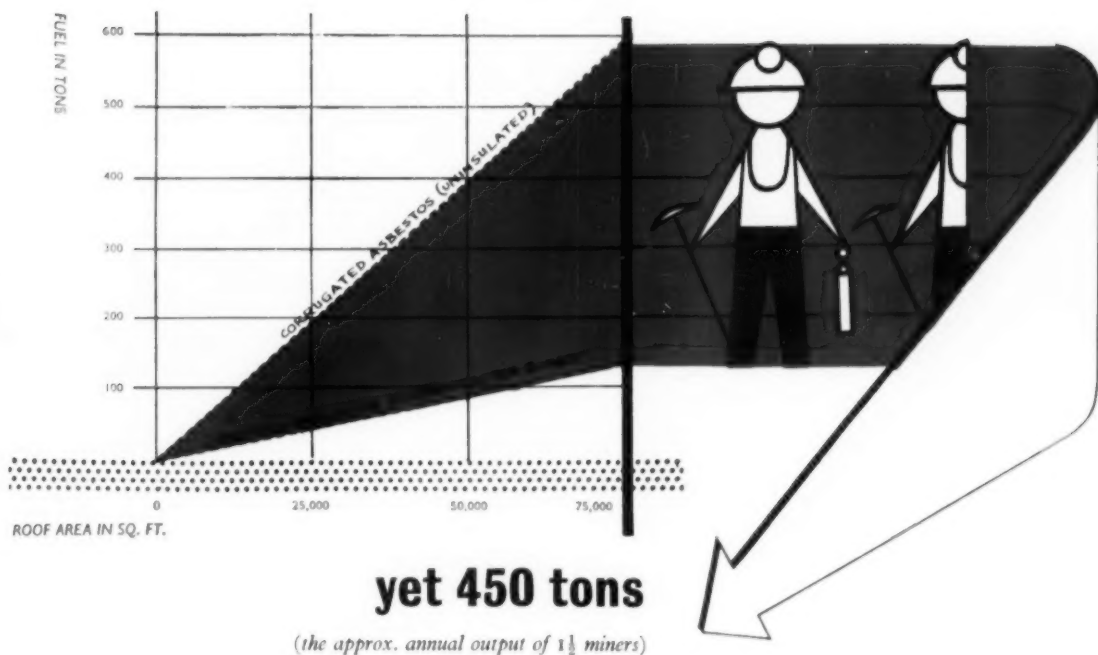
To be concluded in GS. 2.

For further details apply to

GS.1 British Electrical Development Association

2 Savoy Hill, London, W.C.2. Temple Bar 9434

**fuel
is expensive
and scarce**



are wasted every year in this one factory

Repeated warnings of fuel shortage and the high cost of fuel are factors which compel Industry to pay attention to the efficiency of thermal linings in buildings. The accompanying graph is based on actual findings and indicates the amount of generated heat lost through a typical uninsulated roof—and the subsequent saving in cost due to effective insulation. It is well worth a few moments study on the part of your client. 'Paramount' Insulating Gypsum Plasterboard provides the highest degree of thermal insulation and in addition the security of maximum resistance to flame spread and fire penetration. The combination of these two properties makes Insulating Plasterboard the obvious material for factory lining. Our Technical Representatives are always ready to advise and assist you.

INSULATION PLUS HIGH RESISTANCE TO FIRE

Our brochure on the thermal insulation of industrial buildings (written for the layman) will be of interest to your client; a copy will be sent on request.

THE BRITISH PLASTER BOARD (MANUFACTURING) LTD

Bath House, 82 Piccadilly, London, W.1
Tel : GROsvenor 1050



PROTECTION

★ ★ ★ ★ ★ ★ ★ ★

OR

DECORATION?



★ ★

Choose ATLAS PAINTS and get the best of both !

These fine finishes combine, to a remarkable degree, rich, satisfying decoration, and full, lasting preservation for the substance beneath.

The range includes high-quality synthetic paints in full gloss, semi-gloss and eggshell; flat oil finishes, emulsion paints, etc. . . . each grade available in many attractive colours and at reasonable prices.

Send now for a shade-card and get better acquainted with —

ATLAS

dependable

DECORATIVE FINISHES

ATLAS PRESERVATIVE CO. LTD., ERITH, KENT

'Phone: ERITH 2255 (3 lines), 5721 (4 lines)

'Grams: Deoxydizer, Erith.

TAS/AS.171

Notes below give basic data of contracts open under locality and authority which are in bold type. References indicate: (a) type of work, (b) address for application. Where no town is stated in the

CONTRACT • NEWS •

OPEN

BUILDING

AMPTHILL R.C. (a) Erection of (1) a block of bungalows and pair of houses at Marston, and (2) 21 houses at Aspley Guise. (b) Council's Engineer, 12, Dunstable Street. (c) 2gns, each contract.

ANGLESEY E.C. (a) Erection of a new primary school at Llanfawr, Holyhead. (b) County Architect, Shire Hall, Llangefni, Anglesey. (c) 3gns. (d) Sept. 19. (e) Oct. 12.

CANNOCK U.C. (a) Erection and completion of the new central library on a site near the centre of Cannock. (b) Mr. H. Wilcox, High Green. (c) 2gns. (d) Sept. 21. (e) Oct. 22.

CARLISLE C.C. (a) Erection of (Contract No. 3) 108 houses and 42 flats and bungalows at Morton, and erection of a block of 4 shops and flats at Harrahby. (b) City Surveyor, 18, Fisher Street. (c) Sept. 20.

COVENTRY C.C. (a) Erection of 22 bungalows, Henley Green estate. (b) Messrs. C. F. Redgrave and Partners, 6, The Quadrant. (c) 2gns. (e) Sept. 21.

COVENTRY CORPORATION. (a) Erection of (Contract 1) 18 houses and 4 cottages, (Contract 2) 34 houses and 20 cottages, (Contract 3) 22 houses and 13 cottages, Willenhall Neighbourhood Unit. (b) Messrs. A. H. Gardner and Partners, 11, Eaton Road. (c) 3gns. (d) Sept. 5. (e) Oct. 1.

DARLINGTON CORPORATION. (a) Erection of 4 shops and 3 flats over Houghton North estate. (b) Borough Architect, Town Hall. (c) 1gn. (e) Sept. 12.

ESSEX C.C. (a) Erection of Torelli secondary girls' school, Little Thurrock. Approx. cost £139,500. (b) County Architect, County Hall, Chelmsford. (d) Sept. 5.

FLEETWOOD B.C. (a) Erection of 50 houses, West View Estate. (Contract No. 20.) (b) Borough Surveyor, Town Hall. (c) 3gns. (e) Sept. 19.

GUILDFORD B.C. (a) Erection of 16 pairs of houses, Park Barn. (b) Borough Engineer, Municipal Offices, High Street. (c) 2gns. (e) Sept. 20.

HALTEMPRICE U.C. (a) Erection of 62 houses, Manor House Estate, Anlaby. (b) Council's Engineer, Anlaby House, Anlaby. (c) 2gns. (e) Sept. 9.

LEATHERHEAD U.C. (a) Erection of 15 dwellings, Great Bookham. (b) Council's Engineer, Red House. (c) 2gns. (e) Sept. 9.

address it is the same as the locality given in the heading, (c) deposit, (d) last date of application, (e) last date and time for submission of tenders. Full details of contracts marked * are given in the advertisement section.

FIBRE INSULATION BOARD

"QUITFIRE" impregnated is FIREPROOFED (Class 1 to B.S.476/32 Amdt No. 2) and FUNGUS-proofed or TERMITE-proofed (or all three combined.)

Used on Government contracts, Industrial Buildings, Schools, etc. Enquire of your supplier or processors:

S. O. Rudkin & Co. Ltd.

Plantation House, Mincing Lane, LONDON, EC3.

Tel: MANsion House 4406 (3 lines)

THE **TYROL** HAND OPERATED MACHINE Pat. No. 510492
FOR APPLYING TYROLEAN



**OPEN TEXTURE
(ROUGH CAST)
FACINGS**

- LIGHT WEIGHT
- RAPID COVERAGE
- SIMPLE TO USE
- EASY TO CLEAN

PRICE 69.10.0 each delivered from any part of U.K.

Enquiries to: **TYROL SALES LTD.**
54, Park Lane, Croydon, Surrey, ENGLAND
Tel.: CROydon 4529.

HIGH QUALITY WHITE FACING BRICKS

(S.P.W. BRAND)

As supplied to the WAR OFFICE, H.M. MINISTRY OF WORKS, AIR MINISTRY, etc.

Sample and Brochure
sent on request

**M. MCCARTHY
& SONS, LTD.
BULWELL — NOTTINGHAM**

'PUDLO'
Registered Trade Mark
BRAND

CEMENT WATERPROOFING POWDER

USED IN PORTLAND CEMENT
CONCRETE AND RENDERINGS
TO EXCLUDE OR RETAIN WATER

WRITE FOR DIRECTIONS BOOK

To: **KERNER-GREENWOOD & CO., LTD.**
KING'S LYNN

Sole Proprietors and Manufacturers

THE MOST RELIABLE FIRE CEMENT
IS 'FEUSOL'—have you tried it?

One thought of * Shutters
makes the whole world Kin

..... **KINNEAR
KINROD
KINYLON**

IT'S THE ARCHITECT'S JOB TO SPECIFY...

... the best asphalt work obtainable. It is our job to supply him. That's why so many building contracts include asphalt work by Engert & Rolfe. E & R products are as durable for today's needs as they were for the building needs of one hundred years ago, when they first came on the market.

SPECIFY ASPHALT WORK BY

ENGERT & ROLFE LTD

LONDON E 14 (EAST 1411)
and THE QUAY EXETER
(Exeter 3595)



KEYNSHAM U.C. (a) Erection of 120 dwellings, Park West Estate, Keynsham, Bristol. (b) Council's Engineer, Council Offices. (c) 2gns cheque payable to Council. (e) Sept. 20.

KIDSGROVE U.C. (a) Erection of 10 bungalows with communal rest garden, Rookery Estate. (b) Council's Architect, Town Hall. (c) 2gns. (e) Sept. 14.

LEEDS REGIONAL HOSPITAL BOARD. (a) Carrying out improvements to chronic sick wards at the Hospital, Stockwell Road, Knaresborough. (b) Board's Architect, Park Parade, Harrogate. (c) 2gns. (d) Sept. 6. (e) Sept. 28.

LLANELLY B.C. (a) Erection of 8 houses on the Glandafen Road site, also demolition of the 5 unoccupied cottages, Nos. 3-7 Glandafen Road. (b) Borough Architect, No. 5, Goring Road. (c) 3gns. (e) Sept. 17.

LYMM U.C. (a) Erection and completion of 12 bungalows, Elms Farm estate. (b) Council's Engineer, Council Offices. (c) 3gns. (e) Sept. 15.

MIDDLESBROUGH B.C. (a) Erection of a block of 13 shops and 18 flats, Park End—1st development. (b) Borough Engineer, Municipal Buildings. (e) Sept. 12.

MIDHURST R.C. (a) Erection of 18 dwellings, together with access road, sewer and services at Terwick, and 16 bungalows with extension of existing estate road, sewer and services at Rogate. (b) Mr. T. Greenfield, "Newstead". (c) 1gn.

NONSUCH PARK JOINT MANAGEMENT COMMITTEE. (a) Conversion of part of the Mansion House, Nonsuch Park, into 3 flats. (b) Mr. N. Auty, Town Hall, Epsom. (c) 2gns. (e) Sept. 19.

NORTH COTSWOLD R.C. (a) Erection of 6 houses, Chipping Campden. (b) Council's Clerk, Council Offices, Moreton in Marsh, Glos. (c) 2gns. (d) Sept. 3.

N. IRELAND—ROYAL BELFAST ACADEMICAL INSTITUTION. (a) Erection and completion of a new dining hall/kitchen block in the institution grounds, College Square East, Belfast. (b) Mr. J. Wright, 44-45, Textile Buildings, 2, Linenhall Street, Belfast. (c) 5gns. (e) Sept. 13.

N. IRELAND—TYRONE. (a) Erection of a 3-classroom primary school at Curley, Dromore. (b) Mr. W. H. McEvoy, 73, May Street, Belfast. (c) 5gns. (e) Sept. 16.

NOTTINGHAM C.C. (a) Erection of 32 houses, Squires Avenue, Bulwell. (b) City Architect, The Guildhall. (c) 2gns. (d) Sept. 5. (e) Oct. 13.

PETERBOROUGH C.C. (a) Erection of (Group 18) 7 pairs of houses, 4 pairs of houses, 1 block of 8 flats, (Group 19) 4 pairs of houses, 8 pairs of houses, (Group 20) 6 pairs of houses, 3 pairs of houses, and (Group 21) 10 pairs of houses, Walton Estate. (b) City Engineer, Town Hall. (c) 2gns. (e) Sept. 26.

BLAKEY PATENT METAL ANGLE BEAD

Now has TWICE the Number of Perforations, giving TWICE the Strength of the Old Type.



New and really efficient.
No Shrinkage as in Wood
Angles.
Heavily Galvanised.
Great saving in Labour costs compared with Wood or Cement Angles.

Illustrated Brochure with full details on request

PATENT NO.
PRO. 10832/54

BLAKEY
Cabinet & Metal Works Ltd.
41, SCOTLAND ROAD,
NELSON

ESTABLISHED OVER 100 YEARS

GRAY
J. W. GRAY & SON LTD
1 PRINCETON STREET
BEDFORD ROW, W.C1
LONDON &
13 CASTLE STREET
SALISBURY
CHURCH SPIRE RESTORERS

NORTHERN POLYTECHNIC, HOLLOWAY,
LONDON, N.7.

Principal:
T. J. Drakeley, C.B.E., D.Sc., Ph.D. (London),
F.R.I.C., F.R.I.B.
Head of Department of Architecture:
T. E. Scott, C.B.E., F.R.I.B.A.

DAY SCHOOL OF ARCHITECTURE

THE Northern Polytechnic Diploma in Architecture, which is awarded on the successful completion of the five years' full-time course and subsequent passing of the examination in Professional Practice, qualifies students for exemption from the Final Examination for Associateship of the Royal Institute of British Architects. The Diploma is also accepted by the Architects' Registration Council of the United Kingdom as a qualification for registration under the Architects (Registration) Acts, 1931-1938.

School year begins 26th September, 1955.
Fees—£28 per annum.
Students under the age of 18 may be admitted free.

EVENING SCHOOL OF ARCHITECTURE.
(Five years' Course recognised by the R.I.B.A. for exemption from the Intermediate Examination.)
New session begins 26th September, 1955.
Fees from 30s to 70s per course.

Special Design classes and lectures on the Theory of Structures, Hygiene, Materials, Specifications, and Professional Practice in preparation for the Final Examination of the R.I.B.A.

PART-TIME DAY CLASSES

A leaflet describing part-time day courses will be sent on application.

ENTRY TO THE SCHOOLS. Intending day students are interviewed by appointment. Intending evening students will be interviewed from 5.30-7.30 p.m. on 19th and 20th September, or on any subsequent Monday evening at 6.30 o'clock.

Prospectus post free on application.
Telephone: North 1686. 18288

PONTEFRAC T B.C. (a) Erection of 3 shops, Baghill Lane. (b) Borough Engineer, Municipal Offices. (c) 1gn. (e) Sept. 19.

PORTSMOUTH C.C. (a) Erection of a home for aged persons at Stone Street, Southsea. (b) City Architect, 1, Western Parade. (c) £1. (d) Sept. 10.

PRESTON B.C. (a) Erection of proposed disabled persons' centre, Deepdale, Preston. (b) Borough Engineer, Municipal Building. (c) 2gns. (e) Sept. 12.

ST. HELENS E.C. (a) Erection of Carr Mill county primary junior school. Approx. cost £53,000. (b) Director of Education, Education Office; with evidence of work on similar types of buildings. (d) Sept. 12.

SEATON U.C. (a) Erection and completion of 1 block of 18 flats, together with outbuildings, drains and site works, at Manor Road, Seaton. (b) Mr. A. Lamb, 2, Prospect Place, Ottery St. Mary, Devon. (c) 3gns. (e) Sept. 12.

SOWERBY BRIDGE U.C. (a) Erection of a block of 8 shops and 8 maisonettes and a block of external stores with 12 garages, Sowerby site. (b) Mr. J. Northampton, Beech Royd, Beech Road. (c) 2gns. (e) Sept. 15.

SUNBURY-ON-THAMES U.C. (a) Erection of an additional block of 4 garages, with concrete wash-down, on land at Beverley Road. (b) Council Engineer, Council Offices. (e) Sept. 19.

TWICKENHAM CORPORATION. (a) Erection of 11 pram stores, paving, etc., at Towfield Road, Butts Farm Estate, Feltham. (b) Borough Engineer, Municipal Offices. (c) 1gn. (d) Sept. 3.

WAKEFIELD C.C. (a) Erection of 12 flats, Sun Lane. (b) City Engineer, Town Hall. (d) Sept. 6.

WELLINGBOROUGH U.C. (a) Erection of 50 houses, Northampton Road estate. (b) Council's Engineer, Council Offices. (c) 2gns. (e) Sept. 17.

WELTON R.C. (a) Erection of 2 houses, site works, etc., Nettleham. (b) Messrs. Wm. Saunders and Partners, 24, Castle Gate, Newark. or 14, Mercer Row, Louth. (c) 3gns. (e) Sept. 15.

YEOVIL B.C. (a) (Contract No. 2) Erection of 4 brick and reinforced concrete superstructures, comprising pumping station, office block, sludge heating chamber, store and messroom at the new sewage purification works at Pen Mill, Yeovil. (b) Messrs. J. D. and D. M. Watson, 18, Queen Anne's Gate, Westminster, S.W.1. (c) 5gns. (e) Sept. 20.

PLACED

Notes on contracts placed state locality and authority in bold type with (1) type of work, (2) site, (3) name of contractor and address, (4) amount of tender or estimate. † denotes that work may not start pending final acceptance, or obtaining of licence, or modification of tenders, etc.

FINSBURY. (1) Blocks containing 192 flats. (2) Golden Lane, Clerkenwell. (3) Y. J. Lovell and Son Ltd., 6, Bathurst Street, London, W.2. (4) £550,000. Owners: Peabody Donation Fund.

COURSES for all R.I.B.A. EXAMS

Postal tuition in History, Testimonies, Design, Calculations, Materials, Construction, Structures, Hygiene, Specifications, Professional Practice, etc. Also in general educational subjects.

ELLIS SCHOOL OF ARCHITECTURE
Principal: A. B. Waters, M.B.E., G.M., F.R.I.B.A.
103C OLD BROMPTON ROAD, LONDON, S.W.7.
Phone: KEN. 4477. and at Worcester

**MODELS** BY Est. 1883

John B. THORP

98, GRAYS INN RD., W.C.1.

FOR
TOWN PLANNING,
PUBLIC BUILDINGS,
ESTATES AND INTERIORS.

Telephone:
HOLborn 1011

Specify

CERRUX

DECORATIVE PAINTS

CELLON LTD., KINGSTON-ON-THAMES

DEWSBURY B.C. (1) 156 dwellings, (2) Field Lane, (3) Fell Construction Co. Ltd., Wakefield, (4) £185,817.

CITY OF LONDON CORPORATION.

(1) Office block superstructure, (2) North of Guildhall, (3) Trollope and Colls Ltd., Gt. Queen Street, London, W.C.2, (4) About £900,000.

LONDON, E.C. (1) Block of offices for Amalgamated Press Ltd. (2) Farringdon Street, (3) Trollope and Colls Ltd., Gt. Queen Street, London, W.C.2, (4) £1,250,000.

CHERTSEY, SURREY. (1) Factory, for Amalgamated Dental Co. Ltd. (3) John Laing and Son Ltd., London, N.W.7, (4) £200,000.

LONDON, E.C. (1) Block of offices, for P. and O. Steam Navigation Co. Ltd. (2) Aldgate, (3) Kyle, Stewart (Contractors) Ltd., 338 Kilburn High Road, London, N.W.6, (4) £360,000. (1) Fourth section of City Wall House, and block of offices, (2) Chiswell Street and Crosswall, E.C., respectively, (3) McLaughlin and Harvey Ltd., 24 Highbury Grove, London, N.5, (4) £164,000 and £350,000 respectively. (1) Erection of Sadlers' Hall, (3) Holland & Hannen and Cubitts Ltd., 1, Queen Anne's Gate, London, S.W.1, (4) £300,000.

REDHILL, SURREY. (1) Outpatients' department, (2) Redhill Hospital, (3) Rice and Son Ltd., 15 Stockwell Road, London, S.W.9, (4) £107,268.

R.I.B.A. AND T.P.I. QUALIFYING EXAMINATIONS C. W. BOX

F.R.I.B.A., M.R.San.I., A.I.Struct.E.
Courses of instruction by correspondence and personal tuition in studio including Testimonies of Study and Professional Practice.
115 GOWER STREET, W.C.1. Tel.: EUS. 3906

RINGMER BUILDING WORKS, LTD.

BUILDERS & CONTRACTORS

Joinery Specialists

RINGMER : LEWES : SUSSEX

Telephone: Lewes 300



MINTON HOLLINS Ltd Patent Tileworks, Stoke-on-Trent

London's finest new & secondhand Value ARCHITECTS' PLAN CHESTS**MANIPULATIVE JOINTS THAT WON'T PULL OFF**

British Patent No. 596673

FOR HIGH SPEED ASSEMBLY

LOOK at the cross section—metal to metal joint with no loose rings, cones or ferrules, self-seating by means of swage or circular ridge—DOUBLE GRIP CANNOT SLIP!

★ Be Safe use Kingley:—

ABOVE GROUND with B.S.S. 659/1944 Copper Tube, and

BELOW GROUND with B.S.S. 1386/1947 Copper Tube.

Less expensive than alternative methods of jointing—Easy to make in three simple operations.

★ Prompt Delivery.

★ Universally approved by Government Departments, Water Works and Local Authorities, etc.

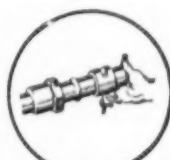
For full particulars and illustrated catalogue write to:—

KINGS LANGLEY ENGINEERING CO. LTD.

KINGS LANGLEY · HERTS

TELEPHONE: KINGS LANGLEY 2215 · 6

TELEGRAMS: CHAMPION · KINGS LANGLEY



● Swages or circular ridge made with tool-proof tool in a few seconds.



● The fitting seats itself against the swages producing 100% efficient joint.



● Nuts tightened and joint completed, each operation a matter of seconds!



UNISTUC

LIQUID STONE

A durable solidifying process for direct application to Concrete, Cement, Stone, Brickwork, Asbestos-Cement and similar surfaces.

FOR EXTERIOR AND INTERIOR USE
Specified by Ministry of Works, Air Ministry,
Government Departments and Public bodies.

PROTECTIVE AND DECORATIVE

THE UNITED PAINT COMPANY LIMITED

Makers of Paints, Enamels, Varnishes and Distempers

15 : ST. HELEN'S PLACE : LONDON : E.C.3.

Telephone : LONDON WALL 4426-7-8-9

And at : 15, TITHEBARN STREET, LIVERPOOL, 3 : MARITIME BUILDINGS, NEWCASTLE-ON-TYNE : 71, JAMES STREET, CARDIFF

Works : STRATFORD, LONDON AND LOWESTOFT

TEMKON AIR CONDITIONING

for Banks · Hotels · Restaurants · Offices
Hospitals · Department Stores
Board Rooms · Clubs etc.

THE BEST EQUIPMENT FOR ALL APPLICATIONS IS SUPPLIED BY TEMPERATURE LTD

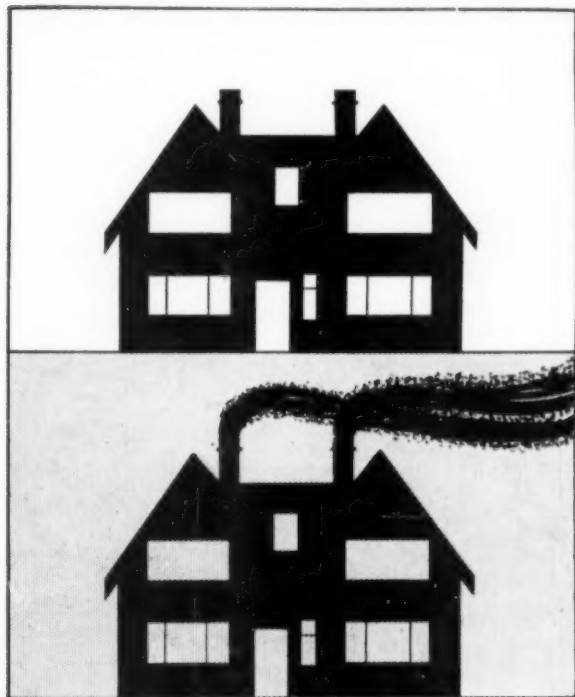
Major contractors to State and Government Departments
and the Petroleum Industry throughout the world.

TEMPERATURE LTD., BURLINGTON ROAD, FULHAM, LONDON, S.W.6

PHONES : RENown 5813 pbx

CABLES : TEMTUR, LONDON

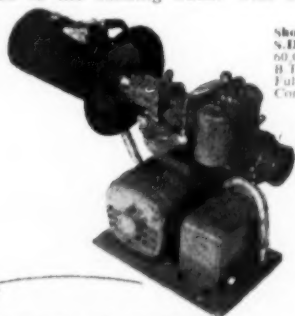
Our Consulting service is available without obligation



Which 'twin' has SHORROCK Oil-firing equipment?

There is no prize for the answer when you realise that a Shorrock Oil-firing Unit cuts out dust, smoke and smell. Where central heating is planned, for utter cleanliness, convenience and precise heat control, the Shorrock Unit is unequalled.

It can also be fitted to the existing boiler with a minimum of trouble. No more stoking — no clinkers — no ashes. Put your house in SHORROCK order.



Shorrock Model S.D.2. Output 60,000 — 120,000 B.T.U. per hr. Full Automatic Control. Patent design giving complete fuel atomisation. Maximum efficiency with minimum consumption.



Crusading for a cleaner and brighter Britain.

SHORROCK

SHORROCK SUPERCHARGERS LTD.
Manufacturers of Superchargers and Oil-firing Equipment
Empress Works, WALSALL ROAD, WILLENHALL
Tel. Willenhall 737

Member of the Owen Organisation

CHANNEL REINFORCED

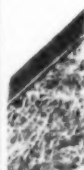
★ Thermacoust

WOOD WOOL SLABS

were designed
and developed
essentially for ROOFS

★ THEY ARE THE BEST

roofing units available today for the modern conception of the BEST type of ROOF . . . low heat losses, exceptional structural strength, easily handled, easily worked units, erected at low labour cost. THERMACOUST Roofing Slabs are being used by leading Architects for public and private building throughout the country.

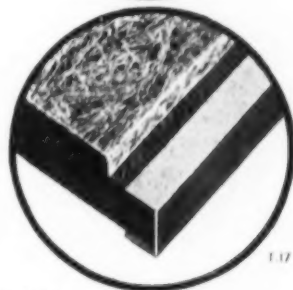


CHANNEL
REINFORCED

No other insulating roofing material has greater structural strength. Supplied in large, lightweight, easily handled units: fire-resistant, sound-absorbing and requiring no ceiling-finish.

REBATED
CHANNEL REINFORCED

THERMACOUST 3" Rebated Slabs provide higher overall insulation. They are specially designed for buildings where the atmosphere is exceptionally warm or humid. They are rebated to take 1" cork strips to prevent condensation on the steel channels.



For information sheets and prices, apply to

THERMACOUST LIMITED,
39 VICTORIA STREET, LONDON, S.W.1 (ABBEY 2738)

Telephone :
ENfield 4877/8

Telegrams :
Quality, Enfield

SHUTTER CONTRACTORS LTD.

LINCOLN WORKS

ENFIELD

MANUFACTURERS OF

Quality

**ROLLING SHUTTERS
IN STEEL, WOOD &
ALUMINIUM ALLOY
FOR ALL TYPES OF BUILDINGS**

APPROVED MANUFACTURERS TO
F.O.C. AND L.C.C. REQUIREMENTS

CONTRACTORS TO
H.M. GOVERNMENT—ALL DEPARTMENTS
PUBLIC UTILITY COMPANIES, COUNCILS
PRINCIPAL RAILWAYS, INSTITUTIONS
Etc.

NATURALLY resistant to damp



From up to 100 feet the Gannet dives among the herring and mackerel shoals. In seconds it is back in the air, every drop of water shed back to the sea. Architects and Builders too depend on natural protection and design and build with "Aqualite" the Bitumen-impregnated Dampcourse that lasts as long as the structure.

BRIGGS AQUALITE

BITUMEN DAMPCOURSE

"Laid in a minute . . . lasts as long as the wall!"

WILLIAM BRIGGS & SONS LTD, DUNDEE.

BRANCHES THROUGHOUT THE UNITED KINGDOM

What your print-room has been waiting for

① Increased density

Greatly increased density of line colour without loss of printing speed

② Greater contrast

Exceptionally smooth colour continuity resulting in remarkable sharpness of line and clarity of print from weak pencil line originals.

Now

③ Faster printing speeds

Introduction of faster printing blackline materials permitting rapid exposure even from relatively opaque originals such as typewritten business letters.

*all available with the improved **UNAX** and **AMMONAX** MATERIALS*

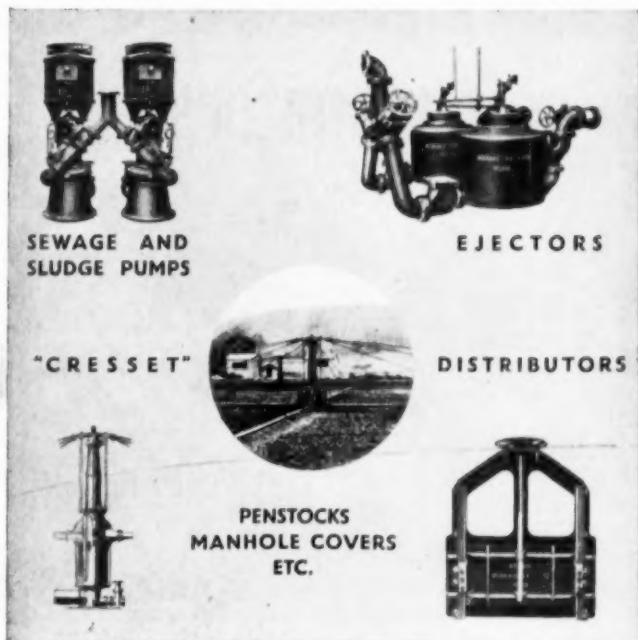
If you are not already using Unax semi-dry or Ammonax ammonia vapour developed Dyeline Processes please write for sample test rolls to prove the advantages of these new coatings

HALL HARDING LTD

STOURTON HOUSE, DACRE ST., LONDON, S.W.1

Telephone ABBEY 7141

Telegrams INSPECT, SOWEST



SEWAGE AND
SLUDGE PUMPS

EJECTORS

"CRESSET"

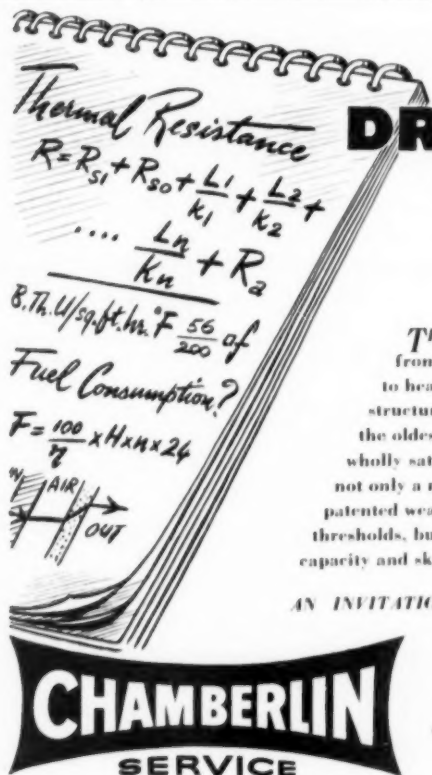
DISTRIBUTORS

PENSTOCKS
MANHOLE COVERS
ETC.

We have been engaged for more than 65 years in the production of all plant and fittings for Sewage Purification and works of Sewerage. Our 'Cresset' Distributors, 'Amphistoma' Pumps, Sewage Ejectors, Penstocks, Manhole Covers, etc., are in use throughout the world. Architects are invited to send for copies of our various catalogues describing the above equipment, together with technical information.

ADAMS HYDRAULICS LTD.

YORK P.O. Box No. 15, York LONDON
2407-8-9 AND LONDON WHITEHALL
8235-4



Thermal Resistance

$$R = R_{s1} + R_{s2} + \frac{L_1}{k_1} + \frac{L_2}{k_2} + \dots + \frac{L_n}{k_n} + R_a$$

B.Th.U./sq.ft.hr. °F 56 of

Fuel Consumption?

$$F = \frac{100}{\eta} \times H \times M \times 24$$

AIR → OUT

CHAMBERLIN
SERVICE

DRAUGHTPROOFING

"to the entire satisfaction
of *Mr. Architect and his client.*"

THIS implies draughtproofing planned from the start—from the drawing board stage—with careful regard to heating and ventilating arrangements and to structural detail—a task for the expert, Chamberlin, the oldest exponents of "weatherstripping" (the only wholly satisfactory method of combating draughts) offer not only a range of scientifically designed and patented weatherstrip sections and thresholds, but experienced technicians in advisory capacity and skilled workers to carry out any installation.

AN INVITATION TO ARCHITECTS AND BUILDERS

We invite architects and builders to send for this binder folder containing full technical data and dimensioned drawings of Chamberlin equipment.

CHAMBERLIN WEATHERSTRIPS LIMITED
436 HOOK ROAD, CHESSINGTON, SURREY
Phone: Lower Hook 1653



There's more to Thermal Storage than buying a few heaters...

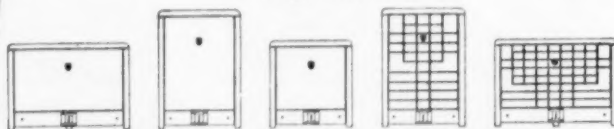


Qualified Thermodare Technicians will provide you with a complete heating scheme—with plans

THERMODARE ADVISORY SERVICE IS AT YOUR DISPOSAL

Although the principles of Thermal Storage are known to most Architects, some guidance on its installation is often helpful. We at Thermodare specialise in this method of heating and will supply complete heating schemes with working drawings whenever required. It is beneficial to all concerned if we can be called in at an early stage. A preliminary discussion without obligation will often save time and expense later.

A range of Five Models



THERMODARE

THERMODARE (GREAT BRITAIN), 79 PETTY FRANCE, LONDON, S.W.1.
Telephone: ABBey 1060/3348

THE ONLY SPECIALISTS IN THERMAL STORAGE UNIT HEATING

'CALLOW ROCK' Gas-burnt WHITE LIME

Is a Non-hydraulic, Class A
Quicklime for Plastering
Finishing Coat, Coarse Stuff
and Building Mortar,
conforming to British Standard
Specification No. 890—1940

**The Callow Rock Lime
Company, Ltd.
Cheddar, Somerset**

THE FACULTY OF ARCHITECTS and SURVEYORS

(with which is incorporated the Faculty of Surveyors of England)

Incorporated (1926) as a Professional Centre

ARCHITECTS

Corporate membership is available to Architects registered in the United Kingdom and Oversea.

SURVEYORS

Examinations are held bi-annually in the following sections: Building, Land, Valuation, Municipal, Quantity, Hydrographic, and Urban and Rural Estate Management.

Important Note: Certain concessions in respect of admission to membership on practice qualifications from Surveyors engaged in the profession will apply for a limited period.

Further particulars and application forms may be obtained from

The Secretary (J),
68, Gloucester Place, London, W.1.

Telephone: WELbeck 9966.



A PERFECT FLAT FINISH



When the judges decision means success or failure, specify and use Raines Oil Flat. You are certain of the perfect matt finish — hard enough to withstand repeated washings. Easy-working, full-bodied and ideal for both spray and brush application. Raines Oil Flat is supplied in a wide range of shades — ready for use. Accurate matchings to any desired shades are available.

RAINES & PORTER LTD.

HULL • LONDON • GLASGOW • NEWCASTLE



THE INSIDE STORY

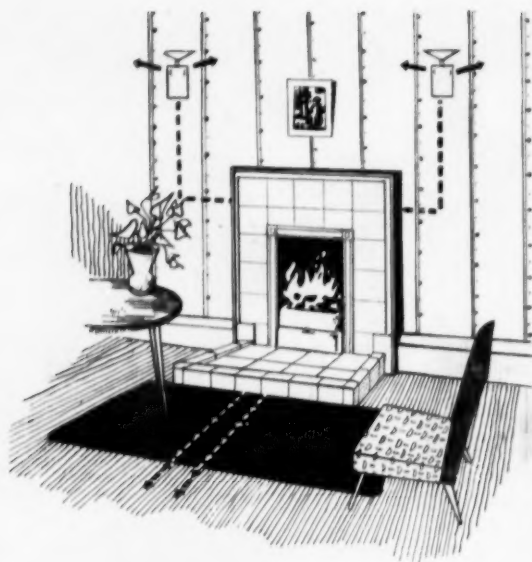
... of the layout of the services and construction of 19th-Century houses is most important for a successful conversion to modern requirements.

For over 60 YEARS we have carried out extensive maintenance and alterations to Georgian and Victorian houses in their Electrical and Building aspects so that our organisation has a wealth of experience which is almost unique. More and more, the need to convert these houses grows and has received Ministerial support. We would like to place this experience at the service of the profession and invite enquiries.

Members of
L.M.B.A.
and E.C.A.

**Rely on RAWLINGS BROS.
for conversion work**

Head Office: 85 GLOUCESTER ROAD, SOUTH KENSINGTON, LONDON, S.W.7. Telephone: FREmantle 8161 (10 lines)



Open fire radiation uniform space heating...

With Dunn's AIRDUN Convector Fire you have the best of two systems of heating. Primarily, you have all the advantages of the traditional open fire—including radiant heating and economy control. In addition to this you have a continuous flow of warm convected air entering the room from grilles situated in the wall or fireplace. (In the example illustrated the grilles are concealed behind light fittings in the wall.)

The AIRDUN Convector has several applications and is especially suited for heating other parts of the house from the one fire.

AIRDUN CONVECTOR FIRE

For full technical details write to the manufacturers who will be pleased to advise you on your specific heating problems.

ALEXANDER DUNN LIMITED
Bothwell Road, Uddingston, Lanarkshire. Tel.: Uddingston 500

THORNTON DRAWING INSTRUMENTS



TECHSET SERIES
STANDARD QUALITY

JAYWESS SERIES
STUDENT QUALITY

KINWEST SERIES
SCHOOL QUALITY

Write for illustrated leaflets and address of your nearest stockist to

A.G. THORNTON LTD.

FIG. BOX 3, WYTHENSHAW, MANCHESTER

99T-1C

£2108

for you at age 65, or

PENSION

of £195 instead of lump sum.

FAMILY PROTECTION

Capital Sums plus bonuses and a tax-free income to your wife and family in the event of your death before 65.

THE COST

£3 13s. 2d. per month (less than 2/6d. per day).

These benefits are based on age 30 next birthday and assume continued rate of bonus.

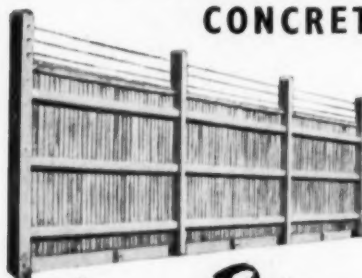
Particulars from The Secretary:

A.B.S. INSURANCE AGENCY, LTD.,

66 Portland Place, London, W.1. (Tel.: LAngham 5721).

A TIMBER FENCE ON A CONCRETE FRAME

PATENT No. 536,241.



*Looks Better...
..Lasts a Lifetime*

This is no ordinary fence that will rot and sag. The posts, gravel boards and rails are concrete, the later having insets to which any type of filling in close, open or ornamental patterns can be nailed or screwed. We also manufacture and erect chain link, paddock, concrete, and cleft chestnut fencing, wrought iron and timber gates. We undertake erection in any part of the United Kingdom.

Descriptive catalogue on request.

PERMAFENCE LIMITED

225/7 HIGH STREET, ACTON, LONDON, W.3
Tel: ACORN 6035-6-7. Grams: Permafence Ealux, London.

Specify...



'ALUMELL'
DOUBLE PATENT GLAZING
FOR THERMAL INSULATION



Photo by courtesy of Messrs.
C. A. Parsons & Co. Ltd.,
Heaton, Newcastle-on-Tyne

MELLOWES & CO. LTD.

SHEFFIELD • LONDON • OLDHAM



The practical answer to Smokeless Heating



The Interior is here shown in Bratt Colbran Suite No. 3115, comprising carved pine architecture, with Avonley Stone slips, recess and kerb. Hearth in Belgian Fossil marble.

One of the most practical contributions to the problems of smoke pollution in our towns and residential areas is the new 'Heaped' Fire, pioneered by Bratt Colbran, and specially designed for continuous and controlled burning of all domestic, solid smokeless fuels.

Our illustration shows the new 'Heaped' Fire, with gas ignition burner, in No. 1855 Independent Interior, forming a freestanding, canopied grate suitable for recessed openings. Restricted inner throating to canopy and adjustable damper may be incorporated if required. Width of fire opening 16", 18", or 21"; overall height 42", or to suit existing mantel openings. Interior supplied in Rustless Steel or Armour Bright finish.

BRATT COLBRAN

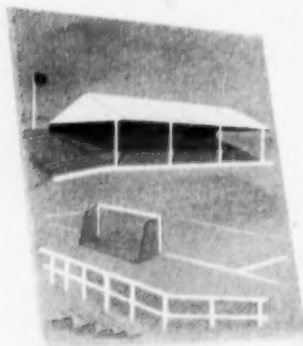
Make a Fine Art of the Fireside

BRATT COLBRAN LIMITED, 10 MORTIMER STREET, LONDON, W.1. Telephone: MUSEUM 9411

SAMUEL ELLIOTT & SONS
(READING) LTD.

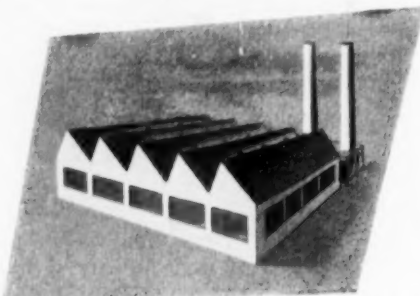
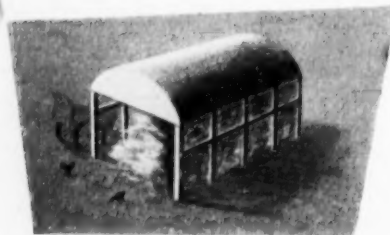
TELEPHONE
READING
71334 (11 LINES)

Elliotts of Reading
Craftsmen in Wood and Metal



give it
the lasting
benefit
of

good
construction
deserves
the best
protection



Rust, chemical corrosion,
atmospheric corrosion —
Ionolac is proof against
them all. Unequalled for
protecting iron, zinc and
steelwork, it is available
in many attractive high-
gloss colours.

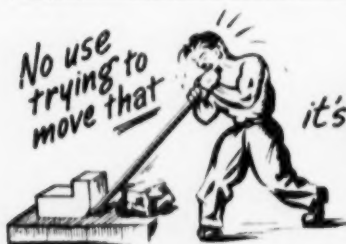
IONOLAC



DUSSEK BROTHERS & CO., LTD.

THAMES ROAD, CRAYFORD, KENT.

Telephone: Bexleyheath 2000 (5 lines)



There is nothing the same as
Uni-Bond. Beware of substi-
tutes. Uni-Bond is guaranteed.

it's

FIXED with

BOND-ANYTHING-TO-ANYTHING

Here's the most astounding bonding agent ever contrived.
No more hacking for keying. Uni-Bond will bond cement/
sand to old surfaces, of tile, rendering, compo, asphalt,
also to Timber, Asbestos, Zinc, Lead, Cloth to Cloth, Glass.
In fact it will Bond Anything To Anything to each and one
another. For inside and external use.

We guarantee the material. It is quite impossible for any
Works Engineer, Architect, Builder, Surveyor, not to have
a use of some kind for Uni-Bond. Uni-Bond is ready for
use—no mixing. Will store for up to two years, and is
used cold.

Uni-Bond

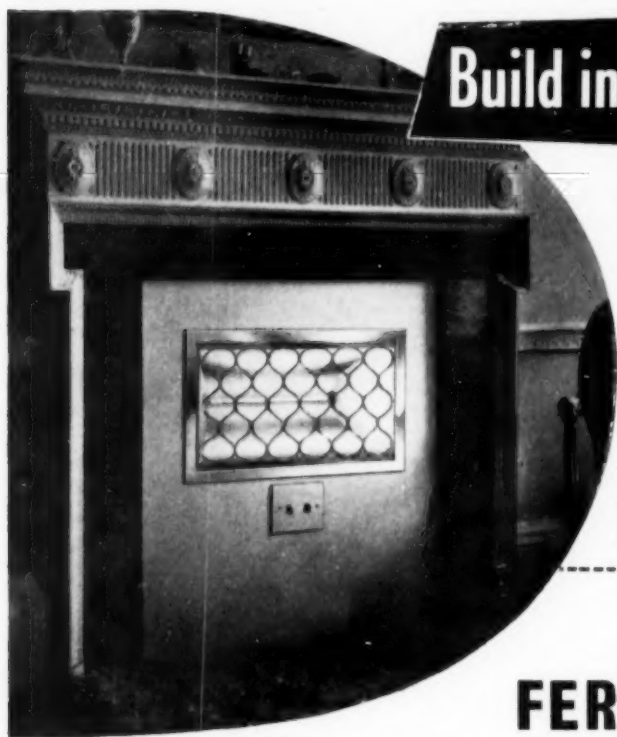


SEND
FOR THIS
BROCHURE
TO-DAY!

LIQUITILE SUPPLY CO. (Dept. IEN) 48 HIGH STREET · CAMBERLEY · SURREY

Telephone
Camberley 2263. Ext 2

Build in immediate comfort



You can make the housewife much happier—and the house a cosier place—by building in Ferranti panel fires.

Ferranti radiant fires are good to look at, and because a wealth of experience has gone to their making, they are efficient and economical in use.

PANEL FIRES	WATTS	WIDTH IN.	HEIGHT IN.	DEPTH IN.	WEIGHT LB.
P.33122	750 1500	19½"	13½"	7½"	11½ lb.
P.33132	1000 2000	25½"	15½"	9"	15½ lb.
P.3310	1250 2500	26½"	22½"	10½"	24½ lb.

All with polished chromium reflector and frame.

There are Ferranti fires to help you solve all your heating problems. Please let us send you our illustrated catalogue.

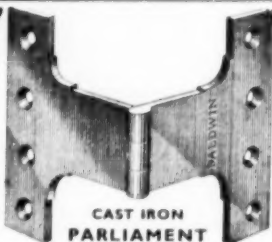
FERRANTI FOR HEAT

FERRANTI LIMITED · DOMESTIC APPLIANCE DEPT · MOSTON · MANCHESTER 10

LISTEN!

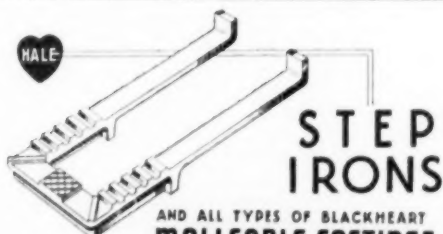
... isn't it quiet?

The astounding smooth, silent service of Baldwin's Cast Iron Parliament Hinges is achieved by the infinite care and attention which goes into their manufacture. Their robust construction ensures efficient trouble-free service day after day—year after year.



BALDWIN'S

Sole Manufacturers: BALDWIN, SON & CO. LTD. STOURPORT-ON-SEVERN



STEP IRONS

AND ALL TYPES OF BLACKHEART
MALLEABLE CASTINGS
For the ENGINEER · SURVEYOR · CONTRACTOR.
SEND FOR PRICES

HALE & HALE (LONDON) LIMITED DUDLEY PORT Staffs

flooring for every purpose

- Jointless Composition
- Rubber Flooring
- Linoleum
- Thermoplastic Tiles
- Uneven sub-floors screeded to receive carpets, linoleum or rubber flooring.

Phone or write for samples. Estimates gladly given and completion dates can be relied upon

early delivery

THE VEITCHI COMPANY LIMITED

flooring specialists

LONDON - Chiltern Works, Southey Road, Tottenham, London, N.15.
Tel: Stamford Hill 9428

LIVERPOOL - 106 Brasenose Street, Bootle, Liverpool, 20.
Tel: Bootle 3597

GLASGOW - 217 West George Street, Glasgow, C.2
Tel: Glasgow Central 1096

OFFICIAL ANNOUNCEMENTS

APPOINTMENTS • CONTRACTS • TENDERS

Rate 1/6 per line, minimum 3/-

Close for press 1st post Monday for following Thursday Issue

APPOINTMENTS

The engagement of persons answering these advertisements must be made through the local office of the Ministry of Labour and National Service, etc., if the applicant is a man aged 18-64 or a woman aged 18-59 inclusive, unless he or she or the employer is exempted from the provisions of The Notification of Vacancies Order, 1952.

LONDON ELECTRICITY BOARD

STRUCTURAL ASSISTANTS AND STRUCTURAL DRAUGHTSMEN.

APPLICATIONS are invited for the above positions in the Construction Branch of the Chief Engineer's Department in Central London.

Applicants for the positions of STRUCTURAL ASSISTANTS in the Civil Engineer's Section should have experience in the design and detailing of either reinforced concrete or steelwork structures. Applicants for the positions of Structural Draughtsmen should have a knowledge of building construction requirements and some experience in detailing reinforced concrete or steel structures.

The posts are graded under Schedule "D" National Joint Board agreement, as Grade 5—£672 to £777 and Grade 6—£455 10s. to £661 10s. per annum respectively. Inclusive of London Allowance. Commencing salaries will be dependent on qualifications and experience.

Application forms obtainable from Personnel Officer, 46-7, New Broad St., London, E.C.2, to be returned completed by 2 September, 1955. Please enclose addressed envelope and quote ref. V/2003/AA. [1449]

BATH CITY COUNCIL

CITY PLANNING & ARCHITECT'S DEPARTMENT.

BATH CORPORATION.

APPLICATIONS are invited for the position of Junior Architectural Assistant at a salary in accordance with the revised Grade A.P.T. 1 (£500-£580 p.a.) Candidates are required to have attended a full-time course of architecture and to have passed the R.I.B.A. intermediate examination or its equivalent. The appointment is subject to the Scheme of Conditions of Service for the National Joint Council for Local Authorities' Administrative, Technical and Clerical Services and the Local Government Superannuation Acts, 1917-1953. The successful candidate will be required to pass a medical examination.

Applications giving details of age, experience and qualifications together with copies of not more than three testimonials, should be addressed to the City Planning Officer and Architect, 7, North Parade Buildings, Bath. The last day for the receipt of applications is Monday, the 19th September, 1955.

JARED E. DIXON,
Town Clerk.

Guildhall,
BATH.

COUNTY BOROUGH OF EAST HAM.

CHIEF QUANTITY SURVEYOR—Grade V
£750-£900.
ARCHITECTURAL ASSISTANT—Grade II
£560-£640.

LONDON Weighting is paid in addition. Salary in excess of the minima may be paid according to qualifications and experience.

Subsistence allowances may be granted over a reasonable period to the persons appointed if unable to obtain suitable housing accommodation, necessitating the maintenance of two homes.

Further details and application forms returnable by September, 16th, 1955, from the Town Clerk, Town Hall, East Ham, E.6. [1475]

ARCHITECT'S DEPARTMENT

VACANCIES for ARCHITECTS, Grade III (up to £945), and ARCHITECTURAL ASSISTANTS (up to £783), for widespread construction programme which includes houses, blocks of flats, schools of all types, and various public and industrial buildings. Application forms and particulars from Architect (AR/UK/A/3), The County Hall, S.E.1. (1189) [0006]

APPOINTMENTS—contd.

LEEDS REGIONAL HOSPITAL BOARD.

APPLICATIONS are invited for the following appointments on the Board's headquarters staff, for work in connection with the design and erection of a new general hospital at Huddersfield.

ONE SENIOR ASSISTANT ARCHITECT. Salary £920 x 30 (5) x 25 (1) — £1,095 per annum. Applicants must be Registered Architects with Final R.I.B.A. or Diploma in Architecture. Experience in hospital planning an advantage and ability to produce good contemporary architecture essential. The applicant selected will be responsible directly to the Regional Architect (P. B. Nash, A.R.I.B.A.) for the control of the section of the Architectural staff engaged on the new project.

ONE ASSISTANT ARCHITECT. Salary £640 x 25 (4) x 30 (4) x 35 (2) — £930 per annum. Applicants must be Registered Architects with Final R.I.B.A. or Diploma in Architecture. Commencing salary dependent upon practical experience at full professional standard, but the number of additional increments will not be more than the number of years by which the applicant's age exceeds 25. Experience in hospital planning an advantage.

ONE TEMPORARY ARCHITECTURAL ASSISTANT. Salary £480 x 20 (7) x 25 (2) — £679 per annum. Applicants must have passed Intermediate examination of the R.I.B.A. Commencing salary dependent upon applicant's age and amount of experience since passing Intermediate examination, but will not exceed £560 per annum. Applicant must have had a sound architectural training and some practical experience in a Practising Architect's office is essential.

Applications, giving all relevant particulars, including age, experience, war service, if any, and the names of two referees should be forwarded to the Deputy Secretary, Park Parade, Farngrave, not later than September 10th, 1955. [1479]

GEORGE WIMPEY & Co., Ltd.

The Architects' Department seek ARCHITECTURAL STAFF enthusiastic to apply their knowledge to new construction techniques covering Houses, Multi-Storey Flats, Offices, Schools and Industrial Buildings for contracts in the U.K. and Overseas.

Appointments range from ARCHITECTS to DRAUGHTSMEN with special interest to those of ability, recognising the value of the designer and technician as an integral part of the production team. Appointments are on a permanent basis, 5 days a week at Head Office, Hammersmith.

Salaries will be according to qualifications and experience, and, subject to satisfactory service, there is a Pension Scheme for those wishing to make a career with the firm.

Applicants should write, giving brief particulars, to E. V. Collins, A.R.I.B.A., Chief Architect, George Wimpey & Co., Limited, 27, Hammer-smith Grove, London, W.6. [1476]

COUNTY BOROUGH OF WEST BROMWICH.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

APPLICATIONS are invited for the under-mentioned appointments:—

PRINCIPAL ASSISTANT ARCHITECT: Salary Grade A.P.T. V. (£750-£900).

ASSISTANT ARCHITECTS: Salary Grades A.P.T. II (£560-£640), III (£600-£725), and IV (£675-£825).

TOWN PLANNING ASSISTANTS: Salary Grade 5 A.P.T. II (£560-£640) and IV £675-£825).

ASSISTANT BUILDING INSPECTOR: Salary Grade A.P.T. II (£560-£640).

N.J.C. Conditions of Service. Applications, naming two referees and stating appointment applied for, should be sent to Borough Surveyor, Town Hall, West Bromwich, by 10 September, 1955. [1460]

LANCASHIRE COUNTY COUNCIL

THERE is a vacancy for a SENIOR ASSISTANT ARCHITECT requiring new experience on School building. Salary Scale £750-£900. Application forms, from the County Architect, P.O. Box 26, County Hall, Preston, to be returned by Monday, 12 September, 1955, quoting Ref. A.A.B.N. [1452]

APPOINTMENTS—contd.

AIR MINISTRY Works Designs Branch require in London and Provinces (with liability for overseas service) ARCHITECTURAL ASSISTANTS experienced in planning/preparation of working drawings and details for permanent and semi-permanent buildings. Salaries up to £810 p.a. (men) and £706 (women). Starting pay based on age, qua's and experience. Paid overtime. Posts non-pensionable with long-term possibilities. Natural born British subjects only.—Write, stating age, qua's, employment details, including type of work done, to any Employment Exchange, quoting Order No. BOROUGH 2303 [1379]

HISTORIC BUILDINGS AND ANCIENT MONUMENTS.

ARCHITECTURAL ASSISTANT required by Ministry of Works in Edinburgh for specialist work on Historic Buildings and Ancient Monuments, including preparation of reports, measured drawings and detailing of repairs and preservation work. Previous experience not necessary, but good draughtsmanship and some architectural training essential.

Salary £453 to £710, commencing salary according to age and experience. Applications to Establishment Officer, 122, George Street, Edinburgh. [1470]

FEDERATION OF RHODESIA AND NYASALAND.

VACANCIES ARCHITECTURAL DRAUGHTSMEN.

PUBLIC WORKS DEPARTMENT: MINISTRY OF COMMERCE AND INDUSTRY.

APPLICATIONS invited from Architectural Draughtsmen with not less than seven years experience in an Architectural Drawing Office.

Commencing salary—£1,000 per annum, rising by annual increments to £1,100. Promotion beyond this point is possible.

Appointment—either to permanent staff or on three year contract.

Application Forms and further particulars from Secretary, Rhodesia House, 429 Strand, London, W.C.2. Closing date September 16. [1485]

SALOP COUNTY ARCHITECT'S DEPARTMENT.

APPLICATIONS are invited from SENIOR ARCHITECTS who have experience and are interested in contemporary architecture, for which the Council's programme offers considerable scope in a great variety of buildings.

Salary £750 to £900 per annum for qualified applicants.

Monthly rail fare and subsistence allowance not exceeding 30/- a week for a period of six months will be paid to married architects temporarily separated from their families.

Forms of application can be obtained from the COUNTY ARCHITECT, COLUMN HOUSE, LONDON ROAD, SHREWSBURY, to whom they must be returned not later than 24th September, 1955. [1488]

COUNTY BOROUGH OF EAST HAM.

ESTIMATOR—Grade III £600-£725.

LONDON Weighting is paid in addition. Salary in excess of the minima may be paid according to qualifications and experience.

A subsistence allowance may be granted over a reasonable period to the person appointed if unable to obtain suitable housing accommodation, necessitating the maintenance of two homes.

Further details and application forms returnable by 16th September, 1955 from the Town Clerk, Town Hall, East Ham, E.6. [1489]

COUNTY BOROUGH OF EAST HAM.

BUILDING INSPECTOR—Grade II—£560-£640
TEMPORARY BUILDING INSPECTOR—Grade II—£560-£640.

LONDON Weighting is paid in addition. Salaries in excess of the minima may be paid according to qualifications and experience.

A subsistence allowance may be granted over a reasonable period to the persons appointed if unable to obtain suitable housing accommodation, necessitating the maintenance of two homes.

Further details and application forms, returnable by 23rd September, 1955, from the Town Clerk, Town Hall, East Ham, E.6. [1490]

APPOINTMENTS—contd.

BOROUGH OF WALTHAMSTOW.
ARCHITECTURAL ASSISTANT

APPLICATIONS are invited for the above appointment in the Borough Architect, Engineer & Surveyor's Department (F. G. Southgate, A.R.I.B.A., M.I.Mun.E., A.M.T.P.I., Borough Architect, Engineer & Surveyor) on Grade III A.P.E. Division (£530-£670, inclusive of London Weighting) commencing salary according to qualifications and experience. Application, with names of two persons for reference, should be received by the undersigned not later than noon on Friday, the 9th September, 1955, endorsed "Architectural Assistant."

G. A. BLAKELEY,
Town Clerk.

Town Hall,
Walthamstow.
E 17.

LONDON COUNTY COUNCIL
ARCHITECT'S DEPARTMENT

VACANCIES exist for Architect Planners (salary up to £783) to deal with Reconstruction Areas. The Council's eight Reconstruction Areas include Stepney-Poplar (the largest Reconstruction Area in the country), South Bank, and the Elephant and Castle. The work includes the preparation of comprehensive three-dimensional layouts, and covers the whole field of planning technique. The group is advised by a Sociologist, and emphasis is on enthusiasm, teamwork, design ability and administrative efficiency.

Particulars and application form, returnable by 12th October, from Architect (AR/EK/TP/5), the County Hall, S.E.1. (11773).

ARCHITECTURAL APPOINTMENTS VACANT

The engagement of persons answering these advertisements must be made through the local office of the Ministry of Labour and National Service, etc., if the applicant is a man aged 18-64 or a woman aged 18-59 inclusive, unless he or she or the employer is exempted from the provisions of The Notification of Vacancies Order, 1952.

JUNIOR DRAUGHTSMAN and TRAINEE required by City firm. Must have had previous architectural drawing office experience or be attending recognised course. Age 17/22 years. Salary £300/400 p.a. Five-day week.—Box 6113, c/o A. & B.N. [1472]

JUNIOR ARCHITECTURAL DRAUGHTSMAN required in City office. At least two years' drawing office experience essential. Interesting work on office and commercial buildings, giving scope for early advancement. Salary £500 p.a.—Box 6114, c/o A. & B.N. [1473]

ARCHITECTURAL ASSISTANT for office in the City of London. R.I.B.A. Inter to Final Standard salary £850/£1,000 according to qualifications and experience.—Please write to W. H. Rogers, 16, Mark Lane, E.C.3. [1474]

SCHERRER & HICKS, 19, Cavendish Square, W.1. require three architectural assistants with previous office experience; 5-day week; please state salary required. [1476]

ASSISTANT required in busy practice in West End, in early twenties, about intermediate R.I.B.A. standard, excellent opportunities for gaining all round experience.—Box 3851, c/o A. & B.N. [10636]

ARCHITECT'S ASSISTANT required immediately in private office. Must be an accurate draughtsman with practical experience. Chiefly country house work. Apply Raymond Erith, F.R.I.B.A., 1, Arcade Street, Ipswich. Tel. Ipswich 4232. [1466]

TWO ASSISTANTS. A senior with administrative in addition to architectural ability, possession of a car an advantage; and a junior with drawing office experience. Salaries in the £1,200-£1,500 and £500-£750 ranges respectively according to experience and qualifications. Interesting work, large-scale housing, Schools, Hospitals, etc. Five-day week. Write or phone William Crabtree, RR, Robert Adam Street, W.1. Welbeck 8918. [1461]

ARCHITECT'S ASSISTANT required for the London office of a firm of Architects with interests throughout the country. Must be of intermediate to Final R.I.B.A. standard. Superannuation scheme.—Apply in writing to Messrs. Cotton, Ballard & Blow, 113a, Wembley Park Drive, Wembley, Middlesex. [10067]

ARCHITECTURAL APPOINTMENTS VACANT—contd.

ARCHITECTS required for progressive Birmingham practice. Those who apply should be experienced and enthusiastic. Vacancies also exist for juniors.—Box 6161, c/o A. & B.N. [1484]

BENNETT, T. P. & SON, require qualified Architect who combines a knowledge of construction with a high standard of draughtsmanship, to co-operate on industrial developments and other building projects.—Apply 43, Bloomsbury Square, W.C.1. Telephone: HOLborn 9277.

QUANTITY SURVEYOR ASSISTANT, vacancy occurs in old established West of England Surveyors office. Permanent and progressive appointment for energetic young Surveyor. Full details in confidence. Qualifications, age, experience and availability.—Box 6162, c/o A. & B.N. [1483]

J. M. Austin-Smith & Partner, 29, Sackville Street, W.1. (Regent 6183) require Architectural Assistants with some office experience in either Factories, Schools, Shops or Flats.—Write giving full details. [1486]

QUANTITY SURVEYOR. West Country firm of Architects seek services of qualified and active Quantity Surveyor. Opportunity and prospects in independent or associated practice. Office accommodation and small flat available.—Write in first place, giving full information of training, experience, age, etc.—to Box 6182, c/o A. & B.N. [1494]

SITUATIONS VACANT

THE BRITISH PETROLEUM COMPANY Limited requires a **CIVIL ENGINEER/SURVEYOR** to undertake engineering and land surveys at its refinery at the Isle of Grain. Age 25-35. Applicants should have had previous experience in levelling and general survey work, setting out of plans, foundations, etc., and a knowledge of hydrographic work is desirable. Higher National Certificate essential. Non-contributory Pension Scheme. Salary according to age, experience and qualifications.—Write, giving full details, quoting H 3113, to Box 8003, c/o 191, Gresham House, E.C.2. [1477]

TENDERS

CITY OF BIRMINGHAM HOUSING
MANAGEMENT DEPARTMENT.

FENCING.

THE Housing Management Committee of the Birmingham Corporation invites tenders for the supply and delivery of approximately 250,000 yards of 3ft cleft chestnut fencing, and 100,000 4ft 6in stakes to be supplied as required during the period of 12 months.

Forms of tender can be obtained from the undersigned at 19-29, Summer Row, Birmingham, 3, and should be returned by September 19th, 1955.

J. P. MACEY,

Housing Manager. [1480]

SITUATIONS VACANT

ARCHITECTURAL ASSISTANTS wanted for busy office (10 miles from London) dealing with large School, Hospital and Housing Projects and with General work. There are vacancies for the following Assistants willing to take responsibility. Qualified and with good office experience. £650 to £800 p.a.

Qualified with small experience or Inter-R.I.B.A. standard with good office experience. £550 to £650 p.a.

Junior with good office experience. £450 to £550 p.a.

Five-day week. Superannuation scheme available. Write giving age and details of training and experience, upon which salary will depend, to Tooley & Foster, Chartered Architects, Midland Bank Chambers, Buckhurst Hill, Essex. [1478]

ENGINEERING and TECHNICAL DRAUGHTSMEN required for Lift, Escalator and Shop-fitting Departments.—Write, stating experience and salary required, to Fredk. Sage & Co. Ltd., Holborn Hall, Gray's Inn Road, London, W.C.1. [1469]

MISCELLANEOUS SECTION

RATE: 1/6d. per line, minimum 3/—, average line 6 words. Each paragraph charged separately.

PRESS DAY Monday. Remittances payable to Iliffe & Sons Ltd., Dorset House, Stamford Street, London, S.E.1.

No responsibility accepted for errors.

CONTRACTS WANTED

SENIOR ASSISTANT (Reg'd. Architect), desires spare-time work with London, Middlesex or Surrey Architects. Wide experience and high standard.—Box 6032, c/o A. & B.N. [1468]

ARTIST DRAUGHTSMAN, young man, 25, Dip. Art. Mural Design, 12 months Architectural experience, seeks progressive position, London Area.—Box 6181, c/o A. & B.N. [1493]

SERVICES OFFERED

CENTRAL Heating and Hot Water Installations designed and executed.—James Palmer, 19A Birkbeck Hill, W. Dulwich, S.E.21. Gip 2518. [1445]

GOOD lettering is essential for commemorative wall tablets, foundation stones, etc. Designs prepared and estimates given for the finished work in any suitable material. Renowned as a centre for lettering since 1934. Sculptured Memorials, 67 Ebury Street, S.W.1. Soane 6549. [10236]

ARCHITECTS, Surveyors and Contractors. Our drawing office service is always available for the preparation of plans, designs, sketches, tracings and prints of houses, bungalows, stores, shops, structural alterations, furniture, interior decorations, signs and landscape gardens. Surveys with photography at any distance. Materials supplied, charges moderate, monthly accounts, strict privacy guaranteed. Quotations if required.—Allerton Studios, Designers and Draughtsmen, 14, Maley Avenue, S.E.27. Gip 3782. [10141]

PLANT FOR SALE

ONE E. N. Mason 42in Dycine Developing Machine, complete with 12C motor and stand. One Halden Ferraz 45in Developing Machine, complete with A.C. motor and stand. Offers to be sent to The Harland Engineering Co. Ltd., Alton, Scotland. [14471]

FOR SALE

COISWOLD Building Stone and Hardcore for sale at Fish Hill Quarry, Fish Hill, near Broadway, Worce.

DELIVERED or collected from Quarry.

APPLY to: Baillie, Brind & Co., Ltd., Prudential Chambers, Banbury, Oxon. [10082]

ALL hardwood mouldings, plain and embossed, embossed ornaments and dowels, send for catalogue and today's lowest trade prices. Threese's Moulding Mills, Ltd., 60 Pownall Road, Dalston, E.8. Clissold 1543/4. [10142]

JOINTLESS composition flooring in attractive colour range—quotations free.—Full particulars from the Lister Asbestos Flooring Co., Ltd., 3, Corbett's Passage, London, S.E.16 (Dept. A), Bermondsey 4341-2-3. [10622]

PRIVATE DRIVES & ROADS

DRIVES, Forecourts, Roads, etc., resurfacing or new construction by Specialists. Tarmacadam, Tar-graniting, Chippings, Shingle, etc. Estimates free.—Stanley Lucas (Slough), Ltd., Alexandra Rd., Slough 21279. [10136]

BUSINESS AND PROPERTY

THREE rooms to let on upper floors of Wimpole Street, London, W.1 premises. Area approx. 500 square feet, suitable for professional use.—Apply Box 6175, c/o A. & B.N. [14487]

SCORES OF DOORS
Choose from 'the largest and most varied stock in the trade'
BYRCE, WHITE & CO. LTD.

HOLBORN OFFICE: Telephone: WY101. Showrooms: Brompton, London, W.8. (Leaving 111 and 1111)

INDEX TO ADVERTISERS

Official Notices, Tenders, Auctions, Legal and Miscellaneous Appointments on pages 47 and 48

A.B.C.D. (Raynes Park) Ltd.	19	Crittall Manufacturing Co. Ltd.	—	Ibstock Brick & Tile Co. Ltd.	—	Ruberoid Co. Ltd., The	1
Adam & Lane & Neeve Ltd.	—	Crofield, Ltd.	—	Imperial Chemical Industries Ltd.	—	Rubery Owen (Shorrock Superchargers) Ltd.	35
Adams Ltd.	37	Crudens Ltd.	—	Johnson Bros. Ltd.	—	Rudkin, S. O., & Co. Ltd.	31
Adams Hydraulics Ltd.	—	Cullum, H. W., & Co. Ltd.	—	Jones & Broadbent	—	Runnymede Rubber Co. Ltd.	—
Adams, Robert (Victor), Ltd.	—	Curfew Doors and Shutters Ltd.	—	Jones, T. C., & Co. Ltd.	—	Sanders, Wm., & Co. (Wednesbury) Ltd.	—
Aerialite Ltd.	—	Cuthell, D. M., & Co. Ltd.	—	Kay & Co. (Engineers) Ltd.	—	Sankey, J. H., & Sons Ltd.	—
Aldam Hill, E., & Co. Ltd.	—	Cutting, R. C.	—	Kerner-Greenwood & Co. Ltd.	31	Schavieren Sheet Metal & Engineering Co. Ltd.	—
Allied Brick & Tile Works Ltd.	—	Dalton, Ballard & Co. Ltd.	—	King, J. A., & Co. Ltd.	—	Secomastic Ltd.	—
Allied Builders	—	Dennison Kett & Co. Ltd.	—	Kings Langley Eng. Co. Ltd.	31	Semtex Ltd.	—
Allied Ironfounders Ltd.	—	Denton Edwards Paint Ltd.	—	Kinnear Shutters	—	Sherwood Floors Ltd.	—
Ames Crosta Mills & Co. Ltd.	—	Dodd Engineering Co. Ltd.	—	Lacrinoid Products Ltd.	—	Shutter Contractors Ltd.	36
Anderson, C. F. & Son, Ltd.	—	Doodson & Bain Ltd.	—	Laing, John, & Sons Ltd.	—	Sigwart Floor Co. Ltd.	—
Armstrong Cork Co. Ltd.	3, 2	Dunlop & Ranken Ltd.	—	Lead Industries Development Council	—	Sissons, W. & G., Ltd.	—
Asot Gas Water Heaters Ltd.	—	Dunn, Alexander Ltd.	40	Le Bas Tube Co. Ltd.	—	S.M.D. Engineers Ltd.	—
Associated Metal Works (Glasgow) Ltd.	—	Durasteel Ltd.	—	Libraco Ltd.	—	Smith, Henry, & Co. Ltd.	—
Atlas Preservative Co. Ltd.	—	Duresco Products Ltd.	—	Light Steelwork (1925) Ltd.	—	Smith, Samuel, & Sons Ltd.	—
Atlas Stone Co. Ltd.	30	Dussek Bitumen & Taroleum Ltd.	—	Lindsay's Paddington Iron Works (1948) Ltd.	—	Smiths, Thomas & Sons Ltd.	—
Automatic Pressings Ltd.	—	Dussek Bros. & Co. Ltd.	42	Lion Foundry Co. Ltd.	—	Smiths Fireproof Floors Ltd.	—
Avery, J. & Co., Ltd.	—	Economic House Drainage Rpg. Co. Ltd., The	—	Liquitile Supply Co.	42	Solignum Ltd.	—
Baldwin, Son, & Co. Ltd.	43	Edison Swan Electric Co. Ltd., The	—	London Fuel Storage Units	—	Sommerfelds Ltd.	—
Barry, Ostlere & Shepherd Ltd.	—	Edison Swan Electric Co. Ltd., The	—	London Electric Firms Ltd.	—	Soundproof Construction	33
Bath & Portland Stone Firms	—	Edison Swan Electric Co. Ltd., The	—	London Brick Co. Ltd.	—	Southern Forge Ltd.	—
Batley, E., Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Lumenated Ceilings Ltd.	—	Spartan Beams Ltd.	—
Baw, W. B., & Co. Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Luxfer Ltd.	8	Staedtler, J. S., Ltd.	—
Baxendale & Co. Ltd.	—	Edison Swan Electric Co. Ltd., The	—	MacAndrews & Forbes Ltd.	—	Stainless Steel Sink Co. Ltd., The	—
Benham & Sons Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Macartney Ltd.	—	Standard Patent Glazing Co. Ltd., The	—
Berite Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Maple & Co. Ltd.	—	Stanley, W. F., & Co. Ltd.	—
Berry, J., & Sons	—	Edison Swan Electric Co. Ltd., The	—	Margolis, M.	33	Steel Radiators Ltd.	—
Berry Wiggins Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Margolis, S.	—	Stekon (Industrial Floors) Ltd.	13
Beynon, T., & Co. Ltd.	O.B.C.	Edison Swan Electric Co. Ltd., The	—	Marley Tile Co. Ltd., The	—	Stevenson, A. & P., Ltd.	—
Black Sheathing Felt Campaign	—	Edison Swan Electric Co. Ltd., The	—	Marryat & Scott Ltd.	—	Stic B Paints Sales Ltd.	—
Blackwells & National Roofings, Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Masonite Ltd.	—	Stiltite Products Ltd.	—
Blackwell Wyckham Ltd.	—	Edison Swan Electric Co. Ltd., The	—	McCarthy, M., & Sons Ltd.	31	Stramit Boards Ltd.	—
Blackey Cabinet & Metal Works Ltd., The	32	Edison Swan Electric Co. Ltd., The	—	Mather & Platt Ltd.	—	Stuart's Granolithic Co. Ltd.	—
Bhondell-Spence & Co. Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Mealing Bros. Ltd.	—	Suga, Wm., & Co. Ltd.	—
Bolton Gate Co. Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Mellow Buildings & Supplies	—	Sun Insurance Office Ltd.	—
Boot, Henry & Sons Ltd.	25	Edison Swan Electric Co. Ltd., The	—	Mellows and Co. Ltd.	41	Sundeala Board Co. Ltd.	4
Bostwick Gate & Shutter Co. Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Merchant Adventurers Ltd.	—	Surflex Flooring Co.	—
Bourner, F. H., & Co. (Engineers) Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Micklethwaite, W. H. & Co. Ltd.	—	Sussex Cement & Concrete Products	—
Box, C. W., & Co. Ltd.	33	Edison Swan Electric Co. Ltd., The	—	Minton Hollins Ltd.	33	Synchronome Co. Ltd.	18
Braby, F., & Co. Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Morris Singer Co.	—	Tarmac Ltd., Vinculum Dept.	—
Bradford, F., & Co. Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Mullen & Lumsden Ltd.	—	Taylor Rustless Fittings Co. Ltd.	—
Brady, G. & Co. Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Mures Welding Processes Ltd.	—	Teleflex Products Ltd.	—
Brain-Arc Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Nairn, Michael, & Co. Ltd.	—	Temperature Ltd.	34
Bratt, Colbray, Ltd.	41	Edison Swan Electric Co. Ltd., The	—	National Association of Master Asphaltes	12	Templex Holdings Ltd.	—
Briggs, Wm., & Sons Ltd.	36	Edison Swan Electric Co. Ltd., The	—	National Coal Board	—	Tenaplas Sales Ltd.	—
British Aluminium Co. Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Newman, Wm., & Sons Ltd.	—	Terradura Flooring Co. Ltd.	—
British Constructional Steelwork Association	—	Edison Swan Electric Co. Ltd., The	—	Noelite Ltd.	—	Thermacoust Ltd.	35
British Fibre Co. Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Normad Ltd.	—	Thermadare (G.B.)	38
British Electrical Dev. Assoc.	28-7	Edison Swan Electric Co. Ltd., The	—	Norris, C. W., Ltd.	—	Thom, J., Ltd.	—
British Electricity	—	Edison Swan Electric Co. Ltd., The	—	Northarc Organisation, The	—	Thompson, John, Beacon Windows, Ltd.	—
British Hermes Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Northern Polytechnic	32	Thorn, J., & Sons Ltd.	—
British Metal Window Manufacturing Assoc.	—	Edison Swan Electric Co. Ltd., The	—	Norwood Steel Equipment (London) Ltd.	22	Thornton, A. G., Ltd.	40
British Paints Ltd.	I.F.C.	Edison Swan Electric Co. Ltd., The	—	Nu-Swift Ltd.	—	Thornton, William, & Sons Ltd.	33
British Plaster Board (Manufacturing) Ltd.	29	Edison Swan Electric Co. Ltd., The	—	Odoni, A. A., & Co. Ltd.	—	Thorp, J. B.	—
British Plumber Ltd.	16	Edison Swan Electric Co. Ltd., The	—	Parmer, Hope & Sugden Ltd.	—	Timber Development Association Ltd.	11
British Reinforced Concrete Engineering Co. Ltd., The	—	Edison Swan Electric Co. Ltd., The	—	Parsons, Thos., & Sons Ltd.	—	Tretol Ltd.	—
British Titan Products Co. Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Patricius Wilbur, C. Co. Ltd.	—	Trianco Ltd.	—
Brookhouse Steel Structures Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Patent Glazing Conference, The	—	Troughton & Young (Lighting) Ltd.	10
Bryce White & Co. Ltd.	45	Edison Swan Electric Co. Ltd., The	—	Penfold Fencing & Engineering Ltd.	—	True Flute Ltd.	—
Burn Bros. (London)	—	Edison Swan Electric Co. Ltd., The	—	Permaforce Ltd.	40	Trussed Concrete Steel Co. Ltd.	—
Cafferata & Co. Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Permanite Ltd.	26	Turner, Chas. & Son Ltd.	—
Callow Rock Lime Co. Ltd., The	38	Edison Swan Electric Co. Ltd., The	—	Philips Electrical Ltd.	7	Turners Asbestos Cement Co. Ltd.	—
Carborundum Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Phoenix Rubber Co. Ltd.	—	Twistell Reinforcement Ltd.	I.B.C.
Canada, Government of	—	Edison Swan Electric Co. Ltd., The	—	Pickering Ltd.	—	Twyford Ltd.	—
Cannon, W. & G., & Sons Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Pilkington Bros. Ltd.	21	Tyrol Sales Ltd.	31
C. & P. Development Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Pilkington Tiles Ltd.	—	Unique Balance Co. Ltd.	—
Cape Asbestos Co. Ltd., The	—	Edison Swan Electric Co. Ltd., The	—	Pittman, Sir Isaac & Sons Ltd.	—	United Merchants Ltd.	—
Carlisle Plaster & Cement Co. Ltd.	23	Edison Swan Electric Co. Ltd., The	—	Pollard, E., & Co. Ltd.	—	United Paint Co. Ltd.	3
Celcon Ltd.	33	Edison Swan Electric Co. Ltd., The	—	Portable Concrete Buildings Ltd.	—	United Steel Companies Ltd.	35
Celotex Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Potter, F. W., & Soar Ltd.	—	Vaporheat Ltd.	—
Cement Marketing Co. Ltd.	14	Edison Swan Electric Co. Ltd., The	—	Proctor Bros. (Wireworks) Ltd.	—	Velchi Company Ltd., The	43
Chamberlin Weatherstrips Ltd.	37	Edison Swan Electric Co. Ltd., The	—	Pyrotenax Ltd.	—	Walker Crosswell & Co. Ltd.	—
Chase Products Engineering Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Radiation Group Sales Ltd.	—	Ward, Thos. W., Ltd.	—
Chatwood Safe & Engineering Co. Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Ragusa Asphalt Paving Co. Ltd.	39	Wesley Trading Co. Ltd.	—
Cheatham, A. J., Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Raines & Porter Ltd.	—	West, A., & Partners	—
Cheatham, H. & Co.	—	Edison Swan Electric Co. Ltd., The	—	Rainham Timber Eng. Co. Ltd.	—	West's Piling & Construction Co. Ltd.	—
Churchouse, C. M., Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Range Builders Ltd.	39	Whitely & Co. Ltd.	—
Clarke Eiland Engineering Co. Ltd.	15	Edison Swan Electric Co. Ltd., The	—	Rawlings Bros. Ltd.	—	Williams & Williams Ltd.	—
Clark Hunt & Co. Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Redpath Brown	—	Williams, John & Sons (Bristol) Ltd.	—
Cloughton Bros. Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Reliable Plywood Co. Ltd.	—	Wood, Edward, & Co. Ltd.	—
Clement Bros., Haslemere, Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Reynolds, H. & L. Construction Ltd.	17	Wormells, R. J. & T. Ltd.	—
Cloakroom Equipment Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Richardson & Starling Ltd.	—	Yale & Towne Manufacturing Co.	—
Clyde Structural Iron Co. Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Ringmer Building Works Ltd.	33	Yorkshire Copper Works Ltd., The	—
Coal Utilisation Council	—	Edison Swan Electric Co. Ltd., The	—	Roller Shutters Ltd.	—	Youngman, W. C., Ltd.	18
Colas Products (Sales) Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Roizat Tank Co. Ltd.	—	Zinc Development Association	24
Colthurst Symons & Co. Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Romuk Ltd.	—		
Compact Ltd.	—	Edison Swan Electric Co. Ltd., The	—	Rubber Improvement Ltd.	—		
Condurp Ltd.	—	Edison Swan Electric Co. Ltd., The	—				
Conex-Terna Ltd.	—	Edison Swan Electric Co. Ltd., The	—				
Cork Manufacturing Co. Ltd.	—	Edison Swan Electric Co. Ltd., The	—				
Costain, Richard, Ltd.	—	Edison Swan Electric Co. Ltd., The	—				
Cozens Ventilators Ltd.	—	Edison Swan Electric Co. Ltd., The	—				

If no page number is quoted, please see previous issues.

CONCRETE CONTRIBUTIONS BY TWISTEEL



Sulphate Store and Bagging Plant, Phoenix Wharf, East Greenwich. Designed in conjunction with Engineers of South Eastern Gas Board. Contractors: Demolition & Construction Co. Ltd.

To make sure of the highest standards in concrete design and construction, at the lowest cost in steel, money and time, call in the TWISTEEL Design Service. Their specialist knowledge, backed by many years of practical experience, enables them to advise architects and engineers, with certainty, on every aspect of design and planning for every type of construction involving the use of reinforced concrete: and they can also supply the reinforcement.

TWISTEEL DESIGN SERVICE

43 UPPER GROSVENOR STREET, LONDON, W.1 · TELEPHONE: GROSVENOR 1216
AND AT BIRMINGHAM MANCHESTER GLASGOW

CARMARTHEN BAY POWER STATION

MAIN STATION BUILDING FOR CENTRAL ELECTRICITY AUTHORITY



Engineers & Contractors: Balfour Beatty & Co., Ltd.

ABERTHAW

THE RELIABLE



PORTLAND CEMENT

SOLE SALES AGENTS
T. BEYNON & CO., LD.,
EMPIRE HOUSE, CARDIFF

Grams: Beynon, Cardiff Phone: Cardiff 29431

LONDON OFFICE:
BEVIS MARKS HOUSE,
BEVIS MARKS, E.C.3

Grams: Beynon, Fen. London Phone: Avenue 2869